630. OPERATIONAL BILLS

630.1 BOAT BILL

- a. PURPOSE. To set forth policies and procedures concerning the ship's boats, and to define the responsibilities of ship's personnel in regard to ship's boats.
- b. RESPONSIBILITY. The First Lieutenant, under direction of the Executive Officer, is responsible for maintaining this bill.

c. PROCEDURES AND RESPONSIBILITIES

(1) THE TRAINING OFFICER shall institute, as directed by the Commanding Officer, indoctrination courses for all line officers on their responsibilities regarding boat safety and management. PQS qualification packages should be used where applicable.

(2) THE EXECUTIVE OFFICER shall:

- (a) Promulgate boat schedules.
- (b) Designate the proper uniform for boat crews in conformance with local regulations.
- (c) Exercise overall supervision of boating. In the absence of the Executive Officer, the CDO shall perform this function.

(3) THE NAVIGATOR shall:

- (a) Provide the boat officers, OOD and boat coxswains with a section of the appropriate harbor chart showing the ship's berth, other occupied anchorages, all commonly used landings and compass courses thereto, and a copy of local traffic rules and navigational dangers and aids.
- (b) Ensure calibration or repair of boat compasses, keep a calibration table in each boat, and inspect it frequently for accuracy.
- (c) When weather conditions dictate, augment the boat crew with a qualified quartermaster or signalman with required signal equipment.
- (d) In conjunction with the First Lieutenant, brief all boat officers before entry into a port where boats will be required. The Navigator or senior QM, if the Navigator is not available, accompanies the first boat run.

(4) THE FIRST LIEUTENANT shall:

- (a) Qualify members of boat crews.
- (b) Provide competent crews for all boats assigned in accordance with this bill.
- (c) Ensure that there are trained boat crew replacements ready at all times.
- (d) Ensure that all boat crew members are at least qualified second class swimmers.
- (e) Conduct thorough training for all boat crew members. This training shall include:
 - 1. Rules of the road.
 - 2. Boat seamanship.
 - 3. Sea manners.
 - 4. Boat stiquette and discipline.
 - 5. Safety precautions.
- (f) Require coxswains to check and record compass courses and enroute times during boat trips in both fair and foul weather and under various conditions of tide.
- (g) Supervise the daily inspection of the ship's boats and equipment. Ensure the report of inspection is entered in the ship's log. This shall include inspection of the engine, hull, lights, boat gear, and emergency equipment; and a test of the fog signal.
- (h) Be responsible for the operation, care, and maintenance of the ship's boats, except boat machinery.
- (i) Train all boat officers and certify their qualifications.
- (j) In conjunction with the Navigator, brief all boat officers prior to entry into port where boats will be required.
 - (5) THE ENGINEER OFFICER is responsible for:
- (a) Training and assigning sufficient numbers of qualified boat engineers.

- (b) The operation and maintenance of boat machinery and electrical installations.
- (c) Conducting boat repairs within the capability of ship's force.
 - (d) Fueling boats, as necessary, prior to 0800 daily.
- (e) Conducting daily inspections of boat machinery and electrical installations.
 - (6) THE OFFICER OF THE DECK shall:
- (a) Directly supervise the ship's boats, and comply with the boat schedules published by the Executive Officer and other proper authority.
- (b) Ensure that boats are operated safely and that all boat safety regulations are observed.
- (c) Ensure that boats are not overloaded, and that loading capacity is reduced to a safe margin when weather conditions require.
 - (d) Use boat officers under such conditions as:
- 1. Foul weather or reduced visibility (existing or expected) and on long trips.
- 2. First boat trips in foreign or unfamiliar harbors and when required by local regulations.
- 3. Returning large liberty parties after sunset, especially prior to sailing.
- (e) Require all boat passengers and crew to wear life jackets when weather or sea conditions are hazardous.
- (f) Ensure that boat coxswains understand the navigational information provided by the Navigator.
- (g) Ensure that designated engineering department personnel fuel and inspect the boats prior to 0800 daily, that they are clean and smart, and that the crew is in proper uniform.
- (h) Assign one member of the boat crew as a bow lookout. The requirement is particularly important in boats such as LCMS where the coxswain's forward vision is severely limited.
 - (i) Give coxswains trip orders and shove off orders.

- (j) Notify the CDO when weather conditions make the suspension or resumption of boating advisable.
- (j) Inspect boats secured alongside hourly. If weather or sea conditions hinder safety, hoist boats in or send them to a safe haven.
- (k) In port, require the coxswain of the lifeboat(s) to inspect and report daily at sunset the readiness of the lifeboat(s); and, at sea, require similar inspection and report at the beginning of each watch.

(7) THE BOAT OFFICER shall:

- (a) Man the assigned boat when called away.
- (b) Ensure that the boat coxswains have received and understand their orders.
- (c) Ascertain who is the senior commissioned line officer in the boat when passengers are embarked. Ensure that the senior commissioned line officer embarked is cognizant that he/she has authority over all persons embarked and is responsible for the safety and management of the boat.
- (d) In time of danger or emergency, give orders to the coxswain necessary to avoid the danger. If not the senior embarked, ensure that the senior commissioned line officer is aware of the danger or emergency.
- (e) Require the boat crew and all personnel embarked in the boat to comply with regulations concerning safety and conduct. All boat passengers and crew must wear life jackets when weather or sea conditions are hazardous.
- (8) COXSWAINS are responsible for operating their boats as follows:
- (a) Rules of the Road must be obeyed strictly. Especially important is the Rule of Good Seamanship which requires that boats give way to ships and seaplanes. Boats should turn away from ships or sailing vessels early and radically to show clearly their intentions not to embarrass larger and less maneuverable vessels.
- (b) Boats must not cut close across the bow or stern of a ship moored or anchored or pass close around the corner of a pier, except when it cannot be avoided. In such situations coxswains must run slowly to ensure no danger of collision with any boat which may be obscured.

- (c) Boats must run dead slow when passing other boats alongside ships or landings, when in narrow or crowded waters, and when passing deeply laden boats.
- (d) Coxswains must record compass courses and enroute times during boat trips in both fair and foul weather and under various conditions of tide.
- (e) Ensure that boat crew and personnel embarked comply with all safety regulations. All on board must wear life jackets when weather or sea conditions are hazardous.
- d. HOISTING AND LOWERING. When anchored in a roadstead, boats not to be used during the night should be hoisted. If hoisting is impractical, they should be secured and frequently inspected. Ship's personnel must be trained in lowering and picking up boats at anchor and underway. Care should be taken not to lower boats in a sea trough or in waters too rough for recovery. Create a lee when practicable on the side to which boats are to be hoisted or lowered.
- (1) SHIP'S SPEED. The ship shall not exceed reasonable safe speed when recovering or lowering boats underway. Five knots is the maximum safe speed under calmest conditions. A slight amount of way on the ship is helpful to the boat crew in hooking the boat to the falls.
- (2) STERNWAY ON THE SHIP. Boats must not be picked up or lowered when the ship has sternway on. If necessary to do so, the falls should be hooked or unhooked in reverse of normal order.
- (3) RECOVERING A BOAT. When recovering a boat at sea, a course should be selected which gives the ship a minimum roll and provides a lee on the side where recovery is in progress. Screws should not be backed in such manner as to throw a wash forward on the recovery side. All hands in the boat should keep firm grip on the knotted lifelines while being hoisted or lowered. All persons in boats being hoisted in or out by the davits shall wear kapok life preservers and safety helmets.
- (4) OVERLOADED BOATS. Boats should not be lowered or hoisted when overloaded. When human life is in jeopardy and depending upon conditions, however, the motor whaleboat loading limit of seven persons, stated in Naval Ships Technical Manual (NSTM) Chapter 583 (NOTAL), may be exceeded for brief life saving evolutions. The boat and boat davit safety factors are sufficient to permit the hoisting of the motor whaleboat to the tail or deck edge when carrying its full capacity. However, under no

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condition shall the boat be swung in or out when carrying more than seven people. If practical, personnel outside the regular crew should enter the boat at the rail or after it is waterborne and disembark prior to hoisting or at the rail.

(5) WHALE BOATS AS LIFEBOATS. Whale boats used as lifeboats should not have rigged canopies. Boats so rigged cannot be lowered or hoisted without danger to the bow hook.

e. EQUIPMENT IN BOATS

- (1) Two 18-inch life rings must be secured--one forward and one aft--in each boat in such manner that they can be easily broken out.
- (2) Kapok life jackets shall be readily accessible for all crew members and passengers. The number of personnel allowed in a boat shall never exceed the number of life jackets.
- (3) Lights prescribed by law must be displayed by all boats underway between sunset and sunrise or in reduced visibility.
- . (4) All boats must carry fog signaling equipment. This shall include a bell and foghorn or other sound-producing mechanical appliance.
- (5) Fueling instructions must be posted in all power boats.
- (6) Maximum operating speed must be posted prominently and permanently in all boats.
- (7) A boat compass must be in all boats while away from the ship.
- (8) Portable hull parts listed in chapter 583, NAVSHIPS Technical Manual (NOTAL) and the boat outfits listed in the Hull Allowance will be carried in boats at all times when waterborne.
- (9) Compass course books and harbor charts must be in the boats when waterborne.
- (10) Recall and lifeboat signals must be posted in the boats where they may be easily read by the coxswains.
- (11) A set of "Standing Orders to Boat Coxswains" shall be kept in each boat.

630.2 CIVIL DISASTER BILL

- a. PURPOSE. To provide for an effective, organized force capable of civil disaster relief work.
- b. RESPONSIBILITY FOR THE BILL. The Executive Officer is responsible for maintaining this bill in a correct and current status.
- c. INFORMATION. In civil disaster relief, units may deal with demoralized, hysterical, or apathetic survivors who are incapable, temporarily at least, of intelligent action in their own behalf. Mass destruction of homes and other buildings, widespread fires, and absence of public utilities should be anticipated. The security of the unit is paramount when dispatching the civil disaster detail.
- d. PROCEDURES AND RESPONSIBILITIES. The civil disaster detail shall be a combination of the assistance detail and the self defense force. If security permits, the entire landing party and all three sections of the assistance detail may be used for large disasters. The responsibilities for the civil disaster detail are identical to those in the Rescue and Assistance Bill and the Self-Defense Force Bill, with the following elaborations:
- (1) The Executive Officer shall be officer in charge of the disaster detail. In the Executive Officer's absence, the Operations Officer or other designated officer shall take charge. The officer in charge shall. be assisted by the Self-Defense Force Commander and the Assistance Detail Officer.
- (2) A platoon headquarters shall be assigned to the landing party. Interpreters, if available and required, will be added to the platoon headquarters.
- (3) The Self-Defense Force shall not carry arms unless so directed by the Commanding Officer.

e. GENERAL PLAN

- (1) PHASE I, PLANNING PHASE. This period begins with the ordering of a unit to a disaster area and extends until the unit's arrival. During this phase the aid most urgently needed shall be determined. Advance preparations shall be based on this information.
- (2) PHASE II, INVESTIGATION OF EXTENT OF DISASTER. Following a large scale disaster, many confusing and inaccurate reports may be received from survivors. During phase II a qualified group is sent to the scene to determine what is most

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urgently needed. No supplies or assistance should be provided until the investigating team reports.

- (3) PHASE III, INITIAL DISASTER RELIEF. Initial effort shall be rescue, fire fighting, and medical aid. The senior officer present or a representative shall set up headquarters in the disaster area to direct and coordinate relief and rescue work, and shall establish liaison with the local government, Red Cross, and any other recognized relief agencies on the scene. Every effort shall be made to cooperate and coordinate with the rescue work by other governments.
- (4) PHASE IV, AID AND ASSISTANCE. During this phase, medical aid and rescue work shall be continued. Food and supplies shall be distributed as directed by the senior officer present. An attempt shall be made to restore disrupted public utilities.
- (5) PHASE V, WITHDRAWAL. Following the relief efforts, and when directed, units shall withdraw from the disaster area. Equipment used in the rescue work shall be recovered prior to leaving unless otherwise directed.

f. ACTION TAKEN

(1) PHASE I, PLANNING PHASE

- (a) A Planning board, consisting of qualified departmental representatives, meets to plan for the specific disaster.
- (b) Maps and/or charts of the area are assembled, and reproduced, if possible, to provide enough maps for rescue operations. The GEOREF grid system shall be used.
- (c) The Operations Department prepares portable communications equipment and prepares a communications plan(s).
- (d) The Engineering Department alerts assistance details. The Weapons Department alerts landing party. Teams should be self-sustaining with adequate supplies of food and water for own use. Crowbars, picks, fire axes, shovels, two blankets, and a stretcher for each assistance team should be provided. If fires are anticipated, firefighting teams should break out firefighting gear.
- (e) Boats, if required, shall be ready and boat crews briefed on landing areas. A beach guard, if required, shall be alerted, the personnel in charge shall be the beachmasters.

- (f) The Supply Department shall provide for food and supplies and be prepared to establish field kitchens and serve meals to survivors.
- (g) The Medical Department should have medical teams equipped to assist as necessary, and be prepared to set up a field hospital.
- (h) All departments should be ready to furnish equipment and supplies. Each department shall account for all supplies and material used in relief efforts.
 - (2) PHASE II, INVESTIGATION OF EXTENT OF DISASTER
- (a) Upon arrival in the disaster area, a survey team should be dispatched immediately. This team should consist of qualified representatives from the medical, engineering, supply, and operations departments. A signalman with portable communications equipment should accompany the group as well as an interpreter (if available) if in a non-English speaking country.
- (b) The survey team shall contact local authorities and determine the extent of immediate assistance needed. This information shall be relayed to the senior officer present for action.
- (c) Upon completion of survey the survey team will return, if requested, to brief the senior officer present and to assist in relief preparations.
- (d) If available, helicopters should survey outlying areas to determine the extent of the disaster.
- (e) Special medical supplies found necessary (that is whole blood, plasma, vaccines, disinfectants, and so forth) should be ordered.
 - (3) PHASE III, INITIAL DISASTER RELIEF
 - (a) The general objectives of this phase are:
- 1. To rescue persons requiring immediate attention.
 - 2. To fight and extinguish fires.
 - 3. To render medical aid.
- $\underline{4}$. To provide aid in any way that will ease the situation. Be prepared to evacuate U.S. nationals.

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- (b) A command center will be set up in the disaster area to work with other governments to avoid duplication of rescue effort. Adequate personnel should be assigned to the center to record operations in its area and to maintain a map for fixing the location of rescue teams, marking areas for search, and ensuring total coverage.
- (c) All personnel shall be equipped to support themselves with food and water while in the disaster area. All personnel shall be unarmed unless specifically authorized by the Commanding Officer.
- (d) As feasible, interpreters shall be assigned to the command center, search teams, and medical units.
 - (4) PHASE IV, ROUTINE AID AND ASSISTANCE
 - (a) The general objectives of this phase are to:
 - 1. Continue medical aid and rescue work.
- <u>2</u>. Provide food and supplies as required and directed.
- 3. Repair insofar as practical, utilities such as communications, water, and electrical supply.
 - 4. Provide temporary shelter.
- (b) Expand medical aid and rescue work to outlying areas. Provide or obtain local transportation to expedite assistance efforts.
- (c) Set up field kitchens to provide food on a survival basis. As soon as possible, feeding should be turned over to local authorities or relief agencies with the unit furnishing basic items such as flour, salt, sugar, tea, milk, coffee, and beans as requested and available. Receipts should be obtained for stocks turned over to relief agencies. Use of indigenous personnel and salvage of local stocks should be encouraged. The sooner survivors are able to assist themselves, the sooner they can recover from the shock.
- (d) Local sources of water shall be investigated and information disseminated to survivors. The location of each source of water shall be fixed on the command center map. The unit shall attempt to restore the local source of power and light. If possible, emergency lines shall be rigged to provide power to important centers. If possible, local communications shall be restored.

- (e) Depending on the severity of the weather, shelter shall be provided for survivors. Tents and/or local sources of material may be used for temporary shelter.
- (f) Distribution of food and water by air drop shall be coordinated to ensure they are made where local authorities or relief workers can supervise distribution. These shall be restricted to areas where supplies are urgently needed.
- (5) PHASE V, WITHDRAWAL. When the situation is under control and when directed, the unit will withdraw from the disaster area. Only emergency relief, not rehabilitation, is the purpose of assisting in a disaster area. All equipment and supplies will be recovered and returned to the unit unless otherwise directed.

630.3 COLD WEATHER BILL

- a. PURPOSE. To set forth procedures for preparing the ship for cold weather operations.
- b. RESPONSIBILITY FOR THE BILL. The Executive Officer is responsible for this bill.
- c. INFORMATION. The cold weather bill will be effective prior to deployment to areas of extremely cold weather. Personnel should execute the measures of this bill as soon as orders for deployment are received.

d. PROCEDURES AND RESPONSIBILITIES

(1) THE EXECUTIVE OFFICER shall supervise overall preparation for cold weather deployment.

(2) THE SUPPLY OFFICER shall:

- (a) Ensure that material and repair parts are at full allowance and submit requisitions as far in advance as possible. Requisitions must clearly indicate special purpose of operation requiring full allowance.
- (b) Ensure that spare boat batteries are on board to allowance. Coordinate with Engineer Officer.
- (c) Ensure special dry cell batteries (for use in temperatures below 0 degrees Fahrenheit), low temperature/cold weather greases, anti-freeze, and cold weather fluids are on board. Coordinate with Engineer Officer and First Lieutenant.
- (d) Ensure that full allowance of materials needed for special mooring are on board. Coordinate with First Lieutenant.
- (e) Ensure that full allowance of extreme cold weather clothing is on board.

(3) THE FIRST LIEUTENANT shall:

- (a) Complete preservation of all exposed areas to resist corrosion during any long period when routine maintenance cannot be done.
- (b) Designate stowage for additional heavy weather and bulk clothing.

- (c) all temporary shelter or windscreens for exposed personnel and topside watchstanders.
 - (d) Rig additional life and safety lines.
- (e) Ensure that enough deicing equipment is on board. Coordinate with Supply Officer.
- (f) Procure sections of telegraph poles 10 feet to 14 feet long for ice fenders.
- (g) Sluice down all running rigging with low temperature grease.
- (h) Store all towing lines, mooring lines, and cargo gear below decks except when in use.

(4) THE ENGINEER OFFICER shall:

- (a) all temporary steam heating coils around piping, directly inboard of the shell, on overboard discharge and drains above the water line.
- (b) Test heating coils in cargo and fuel oil tanks (when appropriate) in accordance with planned maintenance subsystem (PMS) procedures.
- (c) Test operation of preheaters, reheaters, temperature controls, and condensate traps of heating systems in accordance with PMS procedures.
- (d) Procure space heaters for temporary shelters topside. Coordinate with Supply Officer.
- (e) all steam unit heaters in deck cargo handling area.
- (f) Procure two Herman-Nelson burning heaters for warming deck machinery and deicing ground tackle equipment. Coordinate with Supply Officer.
- (g) Ensure that ventilation blowers are operated on low speed to maintain a slight positive pressure to avoid drafts and conserve heat.
 - (h) Prepare foul weather clothing drying rooms.
- (i) If ambient temperatures below 20 degrees F are expected, substitute refrigerator fluorescent lighting tubes for the normal ones installed in cargo spaces.

- (j) Coordinate with other departments in cleaning and inspecting ventilation systems following PMS procedures.
- (k) Replace grease in topside electric motors with proper cold weather grease.
- (1) Drain, flush, and refill hydraulic winch systems with cold weather fluid in accordance with PMS procedures.
- (m) Secure and drain all weather deck fire plugs and fire mains.
 - (n) Stow fire hoses and fittings below decks.
 - (o) Stow P-250 pumps below decks.
 - (p) all electric air preheaters on all boat engines.
- (q) all portable heaters in boat engine compartments.
- (r) Raise boat engine starting battery's specific gravity to 1.280.
- (s) all antifreeze solution in boat engines to provide protection to -20 degrees F, and keep salt water cooling system drained except during operation.
- (t) all thermal insulation above and behind main distribution switchboards to prevent condensation.
- (u) all additional lagging on exposed piping which will not be completely drained when not in use.
- (5) ALL DEPARTMENT HEADS shall review ATP 17 (NOTAL), Naval Arctic Operations, and take such action as may be required.
 - (6) The Oceanography Officer, when assigned, shall:
- (a) Prepare a climatological summary and briefing on expected condition prior to deployment to areas of extremely cold weather.
- (b) Compute and monitor the Wind Chill Factor when the ambient air temperature is below 50 degrees F, and advise command authorities when protective measures are necessary for personnel working in exposed areas.

630.4 DARKEN SHIP BILL

- a. PURPOSE. To prescribe responsibilities and procedures for darkening ship.
- b. RESPONSIBILITY FOR THE BILL. The Damage Control Assistant (DCA), under the Executive Officer, is responsible for this bill.

c. INFORMATION

- (1) SMOKING LAMP. The smoking lamp is out on all weather decks and in any other place visible from outside the ship during darken ship.
- (2) WHITE LIGHTS. No white lights shall be visible from outside the ship.
- (3) FLASHLIGHTS. Only flashlights producing a dim red light shall be permitted in darkened spaces.
- (4) WEATHER DECK ACCESS. Weather deck access shall be via doors and hatches equipped with either light locks or cut-out switches. All precautions necessary to prevent showing any light shall be taken.

(5) LIGHT LOCK SCREENS

- (a) Light lock screens shall be rigged at all times. The screens maybe tied back when the ship is not darkened.
- (b) The DCA may approve removal of specific light lock screens. Unrigged screens shall be stowed as directed by the DCA in a location convenient to the opening.

(6) HANGAR DECKS

- (a) All hangar deck lighting shall be set up for automatic operation when darken ship is ordered.
- (a) Hangar bay roller curtains may be open when turning up aircraft provided all white lights are out and fire doors are closed.
- (c) All lifelines around elevator pits shall be rigged when preparing to darken ship. Unless operations require, they shall remain up at all times when the hangar bays are darkened.

(7) NAVIGATION LIGHTS. Navigation lights shall be extinguished on orders of the OOD under the prescribed lighting measure.

d. RESPONSIBILITIES

- (1) HEADS OF DEPARTMENTS. Heads of department with assigned spaces shall:
- (a) Ensure that spaces are darkened in accordance with the bill.
- (b) Take additional action necessary to effectively darken their spaces when darken ship is ordered.
- (2) DAMAGE CONTROL ASSISTANT. The DCA shall assign responsibilities to divisions for maintaining and closing DOG-ZEBRA fittings and shall supervise the darkening of the ship.
- (3) DIVISION OFFICERS. Division officers of divisions assigned DOG-ZEBRA closure responsibilities shall:
- (a) Ensure closure of all DOG-ZEBRA fittings assigned to their divisions when darken ship is ordered.
- (b) Supervise the maintenance and promulgation of a division Darken Ship Bill listing the DOG-ZEBRA fittings that the division is responsible for and the names of personnel assigned to close them.
 - (c) Ensure that the Division Damage Control Petty Officer periodically inspects the closure of all DOG-ZEBRA fittings within division responsibility, and reports their initial closure to damage control central when darken ship is ordered.
 - (d) Ensure that all light traps under their cognizance are painted dull black and all light trap screens and automatic cut-out switches are in place and in good repair.
 - (3) Ensure that all DOG-ZEBRA fittings within division responsibility are stenciled on both sides with a red "Z" encircled with a black "D".

e. PROCEDURE

- (1) ACTION. When darken ship is ordered, the following action shall be initiated by designated personnel:
 - (a) Officer of the Deck

- 1. Order the following word passed over all circuits of the 1MC announcing system: "DARKEN SHIP; DIVISIONS CONCERNED MAKE DARKEN SHIP REPORTS TO THE OFFICER OF THE DECK (damage control central, when manned)."
- 2. Illuminate navigation lights in accordance with the prescribed lighting measure.
- (b) Division Damage Control Petty Officers. Supervise the closure of all DOG-ZEBRA fittings assigned to their division.

(2) REPORTS

- (a) Division Damage Control Petty Officers. Report to damage control central (if manned) or the OOD that all DOG-ZEBRA fittings assigned to their divisions are closed.
- (b) Damage Control Central (if manned). Report the ship darkened to the OOD when all divisional darken ship reports are received.
- (c) Security Patrols. Check the ship for lights continually throughout the night and report all exposed lights to damage control central (if manned) or the OOD.

630.5 DRY DOCKING BILL

- a. PURPOSE. To specify procedures and assign responsibilities for preparing the ship for entering dry dock, and for establishing required services for the ship while in dock.
- b. RESPONSIBILITY FOR THE BILL. The Engineer Officer, under the supervision of the Executive Officer, is responsible for this bill.

c. INFORMATION

- (1) The responsibilities set forth in Chapter 7, U.S. Navy Regulations, govern the scope of this bill.
- (2) Docking and undocking are all hands evolutions and require coordination with the docking facility, adequate preparations, smart seamanship, and adherence to sound procedures.
- (3) On nuclear ships, the reactor must be shut down before the water level in the dock is permitted to fall below the ship's minimum draft.

d. PROCEDURES AND RESPONSIBILITIES

(1) THE OPERATIONS OFFICER shall:

- (a) Obtain necessary authorization for docking and undocking at the time required by tide and other circumstances.
- (b) Consult with the Navigator, DCA, and Engineer Officer to ensure that sufficient water exists to enter dock under anticipated conditions of list and trim, draft loading, and tide.
 - (c) Make arrangements for tugs as required.

(2) THE FIRST LIEUTENANT shall:

- (a) Ensure that adequate lifelines are rigged.
- (b) Ensure line handlers are on board and on the dock.
- (c) Ensure that personnel working over the side and in the superstructure comply with OPNAVINST 5100.19C (NOTAL), Safety Precautions for Forces Afloat. Exceptions: life jackets will not be required in dry docks without water. Personnel working on scaffolds provided with a guard rail will not require

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a tending line. The safety harness with Dyna-Break and safety line is required.

- (d) Ensure that all staging is adequately constructed and supported and that personnel are instructed in safe practices while working on staging.
- (e) Ensure that all ship's personnel in the dock have "hard hats" and that ship's watches are instructed to ensure that these are worn.

(3) THE DCA shall:

(a) Prior to Docking

- <u>1</u>. Provide ship's docking plan, last docking report, and any special circumstances to the Docking Officer following current instructions.
- 2. Ensure that ship has zero list and specified trim. Maximum allowable draft will depend on the dock and will be specified by the Docking Officer.
- . 3. Ensure that all retractable equipment extending beyond the hull has been housed.
- 4. Ensure that all tanks are either full or empty, if possible, on docking. Main circulating water valves will be open during pumping or flooding of dock.
- 5. Deliver ship's "dry dock fittings" to Docking Officer.
- $\underline{6}$. Ensure that ship and dock have equipment ready for service connections which may include:
 - a. 240 V DC electrical power.
 - b. 440 V AC electrical power.
- \underline{c} . Flushing and drainage connections for sanitary tanks.
- \underline{d} . Cooling water supply and discharge for auxiliary sea water cooling systems.
 - e. Compressed air.
 - f. Cooling water for air conditioning plants.

- g. Cooling water for diesel if an emergency electrical power source is not available.
 - h. Drain pump overboard connection.
- <u>i</u>. Facilities for disposing or retaining any primary coolant discharge.
 - i. Water connections for fire mains.
- 7. On nuclear ships, consult the Engineer Officer to ensure that decay heat for the estimated docking time has been calculated and that adequate cooling facilities, including the required backup, are available.
- (b) In Dock. After landing on the blocks but before reducing depth of water over the keel, ensure that the shore power and auxiliary seawater (ASW) supply to motor generator (MG) sets, reactor coolant fresh water (RCFW) pumps, and diesel engine (if shore power not available) are connected and in operation.
- 1. While ship is in the dock, ensure that no weights are shifted without permission of the Docking Officer. If permission is granted, the DCA shall keep adequate records of the weight shifts and give them to the Docking Officer prior to undocking.
- 2. After the shaft is secured by orders from the Commanding Officer on entering the dock, ensure it remains secured until ordered otherwise by the Commanding Officer on leaving the dock.
- 3. Secure all openings to the dock from inside the ship with valves or blanks when work is not actually being performed on the system.
- $\underline{4}$. Discharge no liquids into the dock except into the containers provided and with the permission of the Docking Officer.
- 5. In freezing weather, drain all water lines subject to freezing.
- $\underline{6}$. Ensure that the ship is adequately grounded at all times.
- 7. Ensure that adequate facilities for disposal or retention of primary coolant discharge are maintained ready and intact after use.

- 8. Provide signs for sanitary tank blows to prevent them from being blown with over five psig while in dock.
- 9. Ensure that adequate fire precautions are observed and that fire extinguishers and fire watches are available during burning and welding operations.

(c) On Undocking

- 1. Ensure that ship is compensated for zero list and specified trim angle.
- 2. Ensure that all equipment extending beyond the hull has been housed.
- 3. Ensure that all connections to sea are observed carefully as dock is flooded prior to undocking and that all leaks are reported immediately to the Commanding Officer and Docking Officer.
- 4. Ensure that circulating water systems are vented when the ship is clear of the blocks but before operating applicable machinery.
 - (4) THE SENIOR MEMBER OF THE HULL BOARD shall:
 - (a) Immediately after Docking

NOTE FOR NUCLEAR SHIPS: Prior to normal access to the dock, the Engineer Officer shall require the proper radiation survey to be conducted and ensure that radiation area signs are properly installed.

- 1. Ensure that the Hull Board (in company with the Docking Officer) inspects the ship being careful to observe:
- <u>a</u>. The position of the ship on the blocks. If the ship is not properly placed for required work or the ship is not adequately centered on the keel blocks or properly shored, notify the Commanding Officer and Engineer Officer immediately.
- \underline{b} . The condition of hull fittings, propeller, and all appendages.
 - c. The condition of the hull.
 - d. The condition of zincs.
 - e. Details of any known or observed damage.

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2. Submit the report of the Hull Board to the Commanding Officer with a copy to the Engineer Officer.

(b) Just Prior to Undocking

- $\underline{1}$. Ensure that the Hull Board inspects in detail all tanks and free flooding spaces opened or worked on during the dock period.
- 2. Inspect all outboard valves to ensure that they are properly secured. Report the results to the Commanding Officer and Engineer Officer, who shall enter the results in the smooth engineering log.
- 3. Inspect the external hull, hull fittings, and appendages to ensure proper condition for waterborne operations.
- 4 Inspect the dock itself to ensure no debris or flotsam will enter ship's tanks or sea chests or foul operating equipment or fittings.
- (5) THE MEDICAL OFFICER (nuclear ships) shall ensure that all personnel working on the ship wear appropriate radiation exposure measurement equipment.

(6) THE DUTY OFFICERS shall:

- (a) In connection with this bill, carry out the duties of all department heads in their absence, working through the Engineering Duty Officer of the Watch for Engineering.
- (b) Ensure that the duty section is properly instructed and strictly follows the safety precautions for dry dock.

(7) THE ENGINEER OFFICER shall:

- (a) Ensure compliance with publications and directives from higher authority.
- (b) Advise the Commanding Officer and Docking Officer of results of required radiation surveys.
- (c) Ensure strict adherence to all instuctions on hull integrity.
- (d) Ensure that the Command Duty Officer and the Engineering Duty Officer are fully informed of plant conditions, safety measures, and special precautions required.

(e) Ensure that adequate topside lighting is provided either by installed dock lights or temporary lighting, particularly in areas where normal passage is obstructed or disrupted by service lines or work in progress.

(8) ALL HANDS shall:

- (a) Use a parachute type safety harness with safety lines tended from above whenever working over the side.
 - (b) Wear hard hats while in the dock.
- (c) Request permission from DCA prior to shifting any weights while in dock.
- (d) Ensure that they do not operate any equipment which projects through the hull except with the permission of the Commanding Officer and with a safety observer outside the hull.
- (e) Refrain from sleeping topside, horseplay, leaning on lifelines, and other negligent practices which might lead to falling over the side in dry dock.
- (9) THE EXECUTIVE OFFICER shall ensure that the provisions of paragraph (8) are published at quarters and in the plan of the day, prior to entering dock and at least weekly while in dock.

e. REFERENCES

- (1) Naval Ships Technical Manual (NOTAL)
- (2) Reactor Plant Manual (Nuclear Ships) (NOTAL)

630.6 EMCON BILL

- a. PURPOSE. To prescribe procedures for expeditiously setting emission control (EMCON) conditions, to ensure the maintenance of EMCON conditions when set, and to designate an Emission Control Center (EMC or EMCON center).
- b. RESPONSIBILITY FOR THE BILL. The Operations Officer is responsible for this bill.

c. GENERAL INFORMATION

- (1) EMCON plans and orders aid Officers in Tactical Command (OTCs) in controlling emissions of their command to avoid detection and/or for successful mission accomplishment.
- (2) EMCON plans vary considerably with fleet and task organization commanders. A supervised positive control system must be used to set and maintain the conditions ordered.
- (3) EMCON orders may be received by directives, OP orders, voice/CW radio, flag hoist, flashing light, and by internal communications when the OTC is embarked. Individual commands are responsible for setting and maintaining ordered EMCON conditions until modified or canceled.

d. DEFINITIONS

Emission control (EMCON). Managing electromagnetic transmissions in such a way that the command receives essential information, while controlling the probability of detection, identification, positioning, and homing by enemy forces. Implicit in this goal is minimum degradation by self-interference through manipulation of the electromagnetic spectrum.

EMCON orders. Any order, except a radar guard order, that implements emission control. EMCON orders may effect, modify, or amplify the EMCON plan or, when no plan has been issued, to establish emission control. EMCON orders may modify emission status provisionally established by other EMCON orders.

EMCON plans. Plans establishing the emission and readiness condition for each piece of electromagnetic emitting equipment.

HERO (Hazards of Electromagnetic Radiation to Ordnance) EMCON. Restricting electromagnetic transmissions to prevent dudding, loss of reliability, ignition, or possible warhead detonation of ordnance.

- e. RESPONSIBILITIES. Figure 6-9 sets forth responsibility for the control of electronic equipment.
- (1) BRIDGE/COMMUNICATIONS. In the event that bridge/communications personnel are informed first of EMCON orders, the order will be passed to the EMC.
- (2) CIC WATCH OFFICER. CIC is normally designated the EMC. The CIC Watch Officer or the EW Officer will disseminate EMCON conditions to departments concerned and aircraft under CIC control. The CIC Watch Officer will notify the bridge and the flag bridge (flag embarked) when the specified EMCON condition is set.
- (3) WEAPONS CONTROL. Weapons control will coordinate HERO EMCON among the embarked air wing/detachments, weapons department, CIC, air department, and communications.

f. PROCEDURES

- (1) Upon receipt of an EMCON order, the EMC will notify communications, bridge, flag bridge, CATCC, navigator, weapons, pri-fly, air intelligence, AIMD, and aircraft under CIC control of the changed conditions.
- (2) CATCC will promulgate EMCON information upon receipt to all ready rooms and aircraft under its control.
- (3) Primary flight control will disseminate EMCON information to the Landing Safety Officer and all aircraft under its control.
- (4) Communications, air, weapons, and navigation departments; CATCC; and the air wing/detachments will report to CIC when the prescribed EMCON is set. When all stations have reported, the CIC Watch Officer will report "EMCON set" to the bridge (and the flag bridge when flag embarked). The CIC Watch Officer will ensure that ESM operators monitor own ship frequencies to prevent unauthorized emissions.
- (5) When doubt exists as to the EMCON condition in effect, stations desiring to energize equipment will first confirm the current EMCON status by contacting the EMC.
- (6) When EMCON orders so require, equipment will be placed in "standby" (unless complete shutdown is necessary to prevent emission, as determined for specific equipment by the CIC or EW Officer).

EQUIPMENT	RESPONSIBILITY
1. RADIO TRANSMITTERS/REMOTE OPERATING STATIONS	BRIDGE, CIC, CATCC, PRI FLY, COMM, AIR WING, LSO
2. RADIOSONDE EQUIPMENT	METRO
3. RADIO HOMERS	CATCC
4. TACAN	CATCC, AIR WING
5. AIRCRAFT RADARS (SEARCH, TRACK, FIRE CONTROL)	AIR WING
6. RADIO ALTIMETER	AIR WING
7. IFF	CIC, AIR WING, CATCC
8. ALTITUDE DETERMING RADAR	CIC .
9. SONAR	CIC
10. UNDERWATER TELEPHONE	CIC
11. AIR AND SURFACE SEARCH RADARS	CIC, CATC
12. PRECISION LANDING RADAR	CATCC
13. APPROACH SPEED INDICATING RADAR	AIR
14. SHIP's FIRE CONTROL RADARS	WEPS
15. FATHOMETER	NAV
16. NAVIGATION RADAR	NAV/CIC
17. ACTIVE ELECTRONIC WARFARE EQUIPMENT	cic

Figure 6-9. Responsibility for the Control of Electronic Equipment

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(7) The Oceanography Officer, when assigned, shall apprise command authorities of the atmospheric refractive effects on electromagnetic emissions and recommend the optimum use of EMCON.

630.7 FLIGHT OPERATIONS BILL

- a. PURPOSE. The purpose of this bill is to set forth departmental responsibilities for manning stations during flight operations.
- b. RESPONSIBILITY FOR THE BILL. The Air Officer is responsible for this bill.

c. INFORMATION

- (1) Flight quarters stations for air department and air wing/detachment personnel are the same as the general quarters stations except that hangar deck repair parties and the aviation fuels repair party will not be fully manned during flight quarters unless specifically ordered by the Air Officer.
 - (2) CV Naval Air Training and Operating Procedures Standardization (NATOPS) Manual and air department instructions provide procedures for landing, launching, and handling aircraft.
 - (3) When flight quarters are sounded for respot or helicopter operations, a reduced number of designated air department and air wing/detachment personnel will man their stations.
 - d. RESPONSIBILITIES. When flight quarters are sounded, heads of departments concerned shall follow the current CV NATOPS Manual; and, in addition:
 - (1) THE AIR WING/DETACHMENT COMMANDER shall ensure that squadron ready rooms and aircraft are manned.

(2) THE ENGINEER OFFICER shall:

- (a) Make sure that the prescribed firemain pressure is available and that electric firemain pumps not in use are lined on the firemain for remote starting.
- (b) Make sure that a high pressure air compressor is started and placed on the line.
 - (c) Make sure that the following stations are manned:
 - 1. Aircraft elevator machinery rooms.
 - 5MC amplifier room.
- 3. Light control stations, forward and aft (night operations).

- 4. Bomb elevator control panels (when required).
- $\underline{5}$. Torpedo elevator control panels (when required).
- 6. AFFF stations, if not set up for automatic operation and HCFF stations, if installed.
 - (3) THE COMMUNICATIONS OFFICER shall:
- (a) Make sure that all communication equipment necessary for control of aircraft is in operation.
- (b) Make sure that all circuits required by the current communication plan are set up and these circuits are patched appropriately throughout the ship.
 - (4) THE MEDICAL OFFICER shall:
- (a) Make sure that adequately trained medical department personnel and equipment are stationed on or near the flight deck.
- (b) Make sure that a medical officer is readily available during launching and landing of aircraft or when taxi operations are in progress. This does not necessarily require that he/she be on the flight deck.
 - (5) THE OPERATIONS OFFICER shall:
- (a) Make sure that all control equipment, except that equipment assigned to other departments, is in operation for control of aircraft.
- (b) Make sure that adequately trained air control personnel have manned flight quarters stations.
- e. CALLS. The OOD shall order the following calls sounded over all circuits of the 1MC announcing system:
 - (1) When all flight quarters stations must be manned:
- (a) "Boots and Saddles" on the bugle (when available).
- (b) The Boatswain's Mate of the Watch (BMOW) shall pass the word "Man all flight quarters stations."

- (c) The BMOW shall pass the word "The fantail is secured," prior to launch or recovery of aircraft.
- (2) When flight quarters are scheduled only for respot, helicopter operations, and so forth:
- (a) "Boots and Saddles," followed by two short blasts on the bugle (when available).
- (b) The BMOW shall pass the word "Flight quarters for respot, (or launching or recovering helicopter, as appropriate)".
 - (3) Special situation (pilots not required):
- (a) "Boots and Saddles" sounded on the bugle (when available).
- (b) The BMOW shall pass the word "Man all flight quarters stations, pilots not required".

f. SPECTATORS

- (1) All personnel whose presence is not required on the flight deck, in the catwalks, or on the flight deck level of the island structure will stand clear of those areas during flight operations.
- (2) The Air Officer shall designate areas of the island structure for use by spectators during flight operations.

630.8 HEAVY WEATHER BILL

a. PURPOSE. To set forth procedures for preparing the ship for heavy weather.

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- b. RESPONSIBILITY FOR THE BILL. The First Lieutenant, under the Executive Officer, is responsible for this bill.
- c. INFORMATION. The heavy weather bill will be placed in effect during periods of actual or forecasted high winds and seas, severe thunderstorms, hurricanes/typhoons, tsunami, or shipboard icing.

d. PROCEDURES AND RESPONSIBILITIES

- (1) THE EXECUTIVE OFFICER shall, upon learning of a heavy weather warning:
- (a) Prescribe setting of material and heavy weather conditions.
 - (b) Supervise overall preparations.
- (c) Publish the following in the Plan of the Day when heavy weather is occurring or expected:

HEAVY WEATHER PROCEDURES

When heavy weather procedures are in effect no personnel are permitted on the weather decks without permission of the Officer of the Deck. Personnel working or standing watch on weather decks during heavy weather, even when proceeding briefly from one station to another, shall wear life jackets. Additionally, personnel working in the weather shall wear a standard Navy safety harness attached to the life line by means of the harness "D" rings. A life jacket shall be worn over the safety harness.

(2) THE COMMAND DUTY OFFICER shall:

- (a) Assume responsibilities of the Executive Officer in his/her absence.
- (b) Notify the Commanding Officer and Executive Officer of unexpected weather conditions.
- (c) Supervise general recall when directed by the Executive Officer.

(3) THE NAVIGATOR shall:

- (a) Maintain a continuous plot of the destructive wind and high sea warnings and of ships in the vicinity.
- (b) Provide anchorage chart on the bridge, if in port, designating bearing points; and commence logging bearings at prescribed intervals.

(4) THE OPERATIONS OFFICER shall:

- (a) Sketch harbor outline on reflection plotter. Plot adjacent shipping so that anchor dragging may be detected.
- (b) Light off surface search radar. These functions shall be assigned to the Combat Systems Officer if the unit has a Combat Systems Department.
- (c) If ordered, have locking pin inserted in air search radar antenna. These functions shall be assigned to the Combat Systems Officer if the unit has a Combat Systems Department.
 - (d) Secure power to prescribed radio antennas.
- (e) Set up sortie communications and organization prior to getting underway.

(5) THE ENGINEER OFFICER shall:

- (a) Supervise setting of material and heavy weather conditions.
- (b) Secure unnecessary ventilation, power, and lighting systems.
 - (c) Coordinate security patrols.
- (d) Regulate trim and list of the ship. Make recommendations to the Commanding Officer for ballasting, and ballast as ordered.
- (e) Consolidate liquid cargo as feasible to reduce free-surface effects.
 - (f) Keep all bilges and voids as dry as possible.
- (g) Keep the Commanding Officer and OOD informed as to watertight integrity.

- (h) Make sure all doors, hatches, manhole covers, and tank tops are secure.
- (i) Make sure frequent inspections of the steering gear are made.
 - (j) Maintain every precaution against fire.
 - (k) Set steaming watch prescribed.
 - (6) THE FIRST LIEUTENANT shall:
 - (a) In Port
- 1. Hoist boats aboard, or send them to a safe berth.
- $\underline{2}$. Rig in all boat booms and accommodation ladders.
 - 3. Run additional mooring lines as necessary.
- 4. At anchor prepare to veer, slip the moor, and/or drop another anchor as directed.
- 5. If moored to a buoy, prepare to veer, slip the moor, or drop an anchor.
- $\underline{6}$. If possible, clear any ships from alongside or rig fenders between the ships.
 - (b) At Sea
 - 1. Put preventers on the anchors.
- 2. Secure all boats and equipment, striking below all movable equipment.
 - 3. Ensure deck cargo is secure.
 - (c) At Sea or in Port
 - 1. Lower and lash fueling rigs to the deck.
 - 2. Run the span wire to padeyes on the deck.

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3. Double lashings on equipment stowed on the main deck and weather decks and on all vehicles.

- $\underline{4}$. Check stowage of all storerooms, workshops, and living spaces under his/her cognizance.
- 5. Make sure all life boats and inflatable life rafts are secured.
 - 6. Check closure of all hatches and doors.
 - 7. Rig heavy weather life lines.
 - (7) THE GUNNERY OFFICER shall:
 - (a) Secure gun watches, and send personnel below.
- (b) Ensure all equipment is secure, train centering pins are engaged, and gun and director covers are lashed down.
- (c) Inspect magazines for proper stowage and securing of magazine battens.
 - (c) Strike down ammunition from ready service boxes.
 - (e) Check closure of all doors and hatches.
 - (8) THE SUPPLY OFFICER shall:
- (a) Secure and inspect all cargo and storerooms under his/her cognizance.
 - (b) Revise menu as necessary.
 - (c) Secure mess furniture and equipment.
 - (9) THE MEDICAL DEPARTMENT shall:
 - (a) Secure all movable medical equipment.
- (b) Station corpsmen in vicinity of forward and after battle dressing stations.
- (c) Ensure all necessary supplies are at each dressing station to handle casualties for several hours or days.
- (d) Prepare empty staterooms in near proximity for serious casualties if it is not possible to move the injured to sick bay.

(10) THE OFFICER OF THE DECK shall:

(a) In Port

- 1. Keep informed of the condition in effect, and ensure proper preparations are taken.
- 2. Station personnel to tend lines as appropriate.
- $\underline{3}$. Request tugs to clear any ships from alongside.
- 4. Make sure all service lines not actually required are removed from the ship.
- 5. Keep the Commanding Officer, Executive Officer, and Command Duty Officer informed of the status of preparations to get underway or cope with the storm when remaining in port.
- 6. If expecting a seismic sea wave (tsunami) or storm surge, have additional mooring lines run out leaving considerable slack in regular mooring lines. If necessary, place fenders between the ship and the pier.

(b) At Sea

- 1. Keep advised of the location and movement of the destructive wind and high sea areas, location of other shipping in the vicinity, and location and distance from land.
- $\underline{2}$. Advise the Commanding Officer of any change of the sea, wind, and barometer.
- 3. Make sure that personnel on watch are adequately protected; and, if advisable, move watches to sheltered areas while maintaining the safety of the ship.
- 4. Minimize the number of personnel on weather decks and, if necessary, restrict movements on weather decks except by direct permission of the OOD.
- 5. Make sure personnel on weather decks wear life jackets (also safety lines if working where they may be swept over the side).
- $\underline{6}$. Be alert for impending material damage to the ship and take appropriate steps to prevent or minimize it.

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- 7. Make sure that lookouts report to the Officer of the Deck if personnel are sighted on the weather decks.
- §. When expecting heavy weather, pass the word "All departments prepare for heavy weather. Make completion reports to the OOD."
- 2. When heavy weather conditions are set, pass the following word frequently: "Heavy weather. All hands stand clear of weather decks. No personnel shall go on the weather decks without permission of the Officer of the Deck. All hands authorized to be on the weather deck shall wear life jackets."
 - (11) The Oceanography Officer, when assigned, shall:
- (a) Provide timely warnings of high winds and seas, severe thunderstorms, hurricanes/typhoons, and the accumulation of ice on the ship.
- (b) Interpret the local effects of warnings of tsunamis (seismic sea waves).
- (c) Brief command authorities and recommend the setting and cancellation of conditions of readiness.
 - e. WEATHER CONDITIONS OF READINESS AND ACTION TO BE TAKEN
- (1) CONDITION FOUR Trend indicates heavy weather and/or high seas within 72 hours.
- (a) The CDO shall notify the Commanding and Executive Officers of condition changes whether aboard or ashore.
- (b) The CDO shall make plans to place a higher condition of readiness in effect.
- (2) CONDITION THREE Heavy weather is possible within 48 hours.
 - (a) In Port (Command Duty Officer)
- 1. Notify the Commanding and Executive Officers of condition changes.
- 2. If capable, take on fuel and make preliminary preparations to get underway for sea or a protected anchorage.
 - (b) At Sea (Officer of the Deck)
 - 1. Rig ship for heavy weather.

- $\underline{2}$. Take action to minimize damage effects of the weather.
- (3) CONDITION TWO Heavy weather and or high seas are anticipated within 24 hours.
 - (a) In Port (Command Duty Officer)
- 1. Notify the Commanding and Executive Officers of condition changes.
- $\underline{2}$. Terminate liberty or grant only on basis of return within four hours.
 - 3. Prepare to get underway on four hours' notice.
 - 4. Secure ship for heavy weather.
- (b) At Sea (Officer of the Deck): Continue action to prevent damage.
- (4) CONDITION ONE Heavy weather is anticipated within 12 hours.
 - (a) In Port (Command Duty Officer)
- 1. Notify the Commanding and Executive Officers of condition changes.
 - 2. Recall liberty party.
- 3. If capable of getting underway, sortie (when directed by SOPA).
- 4. If remaining in port, run extra lines; ready ground tackle; ballast; set bridge, steaming, and anchor watches as appropriate.
- (b) At Sea (Officer of the Deck): Continue action to prevent damage to ship.
- f. SEISMIC SEA WAVE (TSUNAMI) AND STORM SURGE WARNINGS. The seismic sea wave or tsunami (often mistakenly called a tidal wave) generates from a submarine earthquake or volcanic eruption and moves out from the generation area at speeds up to 500 miles per hour (435 knots). Because of this high speed of advance, tsunami warnings are promulgated only a few hours before arrival. The amount of time will vary with location, course, distance, and intervening sea bottom. A storm surge (also mistakenly called

tidal wave) is an abnormal rise of the sea along a shore as the result, primarily, of the winds of a storm. The storm surge is frequently the most dangerous aspect of a coastal storm as heights may reach 20 feet or more. Storm surge warnings can be made well in advance of their occurrence.

(1) AT SEA

- (a) If in shoal waters, attempt to reach deeper water before the arrival of the wave.
- (b) In deep water, there should be no danger from this phenomenon.
 - (2) IN PORT (Command Duty Officer)
- (a) Notify the Commanding and Executive Officers of the warning.
 - (b) If possible, recall the liberty party.
 - (c) Cancel liberty.
 - (d) Set bridge and steaming watches.
- (e) If possible to get underway and into deep water, do so as soon as possible.
- (f) Hoist all boats and accommodation ladders and rig in boat booms.
- (g) If unable to get underway, veer additional chain and drop another anchor.
- (h) If alongside, run additional slack mooring lines and wires to take the strain if the normal mooring lines part. Slack normal mooring lines.
 - (i) Attempt to clear all ships alongside.
- g. ROGUE WAVES. A dangerous phenomenon during periods of high seas is the occasional appearance of a giant wave, which may be nearly twice the height of the significant wave height being experienced at the time. These waves cannot be forecast precisely. Therefore, they may occur without warning, although advisories may be issued describing general areas where these waves are likely to occur. Ships should be rigged for heavy weather when traversing these potential giant wave areas if avoidance is not operationally feasible.

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- 630.9 AMPHIBIOUS AVIATION AND AIR CAPABLE SHIPS AVIATION OPERATIONS PROCEDURES BILL
- a. PURPOSE. To set forth guidance for Amphibious Aviation and Air Capable ships aviation operations.
- b. RESPONSIBILITY FOR THE BILL. The Executive Officer shall assign an appropriate officer to maintain this bill.

c. INFORMATION

- (1) Amphibious Aviation and Air Capable ships aircraft missions include search and rescue, vertical replenishment, undersea warfare, amphibious assault, aerial reconnaissance, and airborne mine counter-measures. Aircraft operate with virtually all fleet units.
- (2) To ensure safe aviation operations, the standard operating procedures in NWP 3-04.1 and the LHA/LPH/LHD/MCS NATOPS manuals will be used unless modified by appropriate authority in unusual situations.

630.10 HELICOPTER INFLIGHT REFUELING BILL

- a. PURPOSE. To set forth a guide for helicopter inflight refueling operations.
- b. RESPONSIBILITY FOR THE BILL. The Operations or Weapons Officer (Combat Systems Officer, if the unit has a Combat Systems Department) as directed by the Commanding Officer, shall maintain this bill.
- c. INFORMATION. To ensure safe helicopter inflight refueling operations, the standard procedures in NWP 42 (NOTAL) will be used as modified by appropriate authority to account for unusual situations.

630.11 INTELLIGENCE COLLECTION BILL

- a. PURPOSE. To establish responsibilities, procedures, and guidance for collecting and reporting intelligence information (both at sea and in port).
- b. RESPONSIBILITY FOR THE BILL. The Intelligence Officer, under the supervision of the Operations Officer, is responsible for maintaining this bill. The Officer of the Deck is responsible for its execution.
- c. INFORMATION. The routine collection of intelligence will not interfere with operations and training. All collection activities will be strictly overt unless specifically directed by higher authority.
 - d. PROCEDURES AND RESPONSIBILITIES (AT SEA)
 - (1) THE OFFICER OF THE DECK shall:
- (a) Notify the Commanding Officer and call away the Intelligence Collection Team upon sighting a target of intelligence interest.
- (b) If directed by the Commanding Officer, maneuver the ship around the target to obtain full photographic coverage. Ensure that such maneuvering is not construed as hostile, threatening, or provocative.
- (c) Identify the target from available recognition guides.
 - (d) Record the following data:
 - 1. Date, time, position of sighting
 - 2. CPA and unusual maneuvers of the target
 - 3. Nationality and hull markings
 - 4. Unusual deck cargo or personnel topside
- 5. If a merchant ship, the hull type and sequence of uprights.
 - 6. Sea state and weather conditions
 - 7. Range to target at time of photographs.

- (2) THE PHOTOGRAPHIC OFFICER, as part of the Intelligence Collection Team, shall report to the bridge with the intelligence camera kit to photograph according to current instructions on obtaining optimum photographic coverage. Film negatives and prints of target photography will be provided the Intelligence Officer for annotation and disposition as required by current instructions on handling intelligence photography. The Intelligence Officer will also be provided the date and time of photography, camera type, focal length, film type, and type of filter (if used).
- (3) THE CIC WATCH OFFICER, as a member of the Intelligence Collection Team, shall:
- (a) Maintain a Dead Reckoning Tracer (DRT) plot of the target, and provide target course and speed information to the OOD.
- (b) Conduct an Electronic Intelligence (ELINT) search, identifying, logging, and reporting intercepted signals associated with the target.
- (c) Recommend any desirable own-ship EMCON plan to the OOD.
- (4) THE SONAR WATCH OFFICER/PETTY OFFICER shall tape record and log any acoustic signals associated with the target and provide the data to the Intelligence Officer for disposition as required by current instructions for handling acoustic intelligence (ACINT).
- (5) THE INTELLIGENCE OFFICER, as leader of the Intelligence Collection Team, shall:
- (a) Report to the bridge and coordinate collection activities when the Intelligence Collection Team is called away.
- (b) Collect data recorded by various team members, and prepare messages and reports required by current instructions.
- e. PROCEDURES AND RESPONSIBILITIES (IN PORT). Intelligence collection activity in port will be as directed by the Commanding Officer in response to specific intelligence collection requirements or as conditions indicate. The Intelligence Officer will coordinate in-port collection activity and report information obtained following pertinent directives.

630.12 SELF DEFENSE FORCE BILL

- a. PURPOSE. To establish the organization of the self defense force, and to promulgate responsibilities for its operation, training, and logistic support.
- b. RESPONSIBILITY FOR THE BILL. When no Security Officer is assigned the Weapons Officer (or Combat Systems Officer, if the unit has a Combat Systems Department) is responsible for this bill. The CO of the Marine Detachment (MARDET) (if assigned) and CMAA will assist as required.

c. INFORMATION

- (1) Units will form, equip, and train a self defense force to augment the normal watch and/or other on-board security organizations. The force will provide a capability for reacting to emergency security situations aboard ship and at pier side to protect the ship, its sensitive equipment, and the ship's personnel. The force will provide a capability for immediately reacting to protect the ship, its sensitive equipment and the ship's personnel, in emergency security situations or against acts of terrorism aboard ship, at pierside, or in water, surrounding the ship whether inport or underway. A concept of defense in depth will be used, wherever possible, to provide the earliest advance warning of impending threat. Training and preparedness are vital to the success of the defense force.
- (2) Self defense force personnel must be mature, reliable individuals, skilled in the safe and effective use of small arms, and knowledgeable in interior guard, riot control procedures, and the establishment of a perimeter defense on board ship and at a pier side. Marine security detachments, when embarked in sufficient numbers, will fulfill this function. The size of the self defense force shall be based on the size of the ship's complement. One 13-man squad (squad leader plus three four-man teams) per 200 crew members, with a minimum of one squad and a maximum of three squads per ship is a sound ratio. On ships with less than 100 crew members and on submarines the size of the security force will be determined by the Commanding Officer/Type Commander. Squads and teams should be commanded by a qualified junior officer. On ships having only one squad as the selfdefense force, the squad should be commanded by a junior officer or senior petty officer.
- (3) The commander of the self defense force shall command the unit in accordance with the orders of the Commanding Officer of the ship or such other authority as the Commanding Officer may direct.

- (4) Self defense force personnel shall be relieved from afloat watches and special duties whenever the defense force is activated or on a standby status.
- (5) Because of the variety of possible threats, numerous bills could be key to activating the Self Defense Force Bill. Members of the following Bills should be trained in those procedures:
 - (a) Security Bill (para. 620.9)
- (b) Security from Unauthorized Visitors Bill (para 620.10)
 - (c) Security Watch Bill (para. 620.11)
 - (d) Unit Security Bill (para 620.12)
 - (e) Nuclear Reactor Security Bill (para. 640.9)
 - (f) Anti-Sneak/Anti-Swimmer Attack Bill (para 650.1)

d. RESPONSIBILITIES

- (1) The COMMANDING OFFICER shall:
- (a) Ensure that all possible measures are taken for the self defense of the command.
- (b) Ensure that a trained self defense force exists within the command.
 - (2) HEADS OF DEPARTMENTS shall:
- (a) Assign qualified personnel to the self defense force.
- (b) Provide the Security Officer (or when no Security Officer is assigned, the Weapons Officer) with an up-to-date roster, by division, of the self defense force personnel.
- (c) Assignments will be made in a manner which ensures maximum stability in defense force composition.
 - (3) The COMMUNICATIONS OFFICER shall:
- (a) Provide communications equipment as requested by the commander of the defense force.

- (b) Prepare a self defense force communications plan when required.
 - (4) The OPERATIONS OFFICER shall:
- (a) Schedule and coordinate the operations of the defense force.
- (b) Coordinate logistic and communications requirements of the defense force when operating ashore.
- (c) Make sure that the defense force is adequately trained and arrange for training facilities ashore as required.
- (5) The Security Office, or, when no Security Officer is assigned, the Weapons Officer, assisted by the CMAA or the COMARDET, if one is assigned, shall:
- (a) Maintain a current master list of all personnel assigned to the defense force.
- (b) Coordinate the training of the defense force, exercising the force at least monthly.
- (c) Assign an officer or senior petty officer, subject to the approval of the Commanding Officer, to command the defense force.
- (d) Provide realistic training on a regular basis to exercise the defense force in countering all threats, particularly terrorism.
- (e) Integrate the self-defense force into the command's physical security plan.
 - (f) Implement anti-terrorism security measures.
- (6) The Weapons Officer (or Combat Systems Officer, if unit has a Combat Systems Department) shall:
- (a) Ensure that defense force arms and equipment are ready and in good repair.
- (b) Maintain and issue arms, equipment, and ammunition to the defense force as required.
 - (7) The SUPPLY OFFICER shall:
- (a) Issue rations and water to the defense force as required.

- (b) Provide items of supply required by the defense force which are not specifically identified elsewhere in this bill.
 - (8) The TRANSPORTATION OFFICER shall:
- (a) Provide vehicular transportation for the defense force as requested by the Operations Officer.
- (b) Provide vehicle operator and maintenance personnel to support the defense force.
 - (9) The FIRST LIEUTENANT shall:
- (a) Provide boats, crews, and gear for transportation of personnel and supplies.
 - (10) The COMMANDER OF THE SELF-DEFENSE FORCE shall:
 - (a) Command the defense force in all operations.
- (b) Coordinate the issue of equipment and rations to the defense force.
- (c) Assist the Security/Weapons Officer in the training and operations of the defense force.
 - (11) The INTELLIGENCE OFFICER shall:
- (a) Exploit all sources of intelligence including local and government officials to determine possibility and nature of an expected threat.
- (b) Keep Commanding Officer appraised at any potential threatening situations.

630.13 NAVIGATION BILL

- a. PURPOSE. The purpose of this bill is to prescribe uniform responsibilities and procedures for safely navigating the ship, including navigating in restricted waters in low visibility.
- b. RESPONSIBILITY FOR THE BILL. The Navigator is responsible for this bill.
- c. INFORMATION. The Commanding Officer is responsible for the safe navigation of his/her ship or aircraft, except as prescribed otherwise for ships at naval shipyards or stations, in dry dock, or in the Panama Canal. In time of war or during exercises simulating war, the provisions of this bill pertaining to use of lights and electronic devices may be modified by competent authority. See also Chapter 7 of U.S. Navy Regulations and U.S. Coast Guard Rules of the Road.

d. PROCEDURES AND RESPONSIBILITIES

- (1) THE COMMANDING OFFICER of a ship and, as appropriate, of an aircraft shall:
- (a) Preserve all information received concerning safe navigation.
- (b) Make sure that the authorized allowance of nautical and aeronautical charts and publications are on board and that such charts and publications are corrected to date before use.
- (c) In case of doubt, obtain from reliable sources (including foreign) all useful information about safe navigation over proposed routes or places of visit.
- (d) Keep informed of the error of all compasses and other aids to navigation.
- (e) Immediately before leaving port and as soon as practical after entering port, require the Navigator to ascertain and enter the draft of the ship (forward and aft) in the log.
- (f) Have the anchor ready to let go when there is danger of grounding.
- (g) Make sure that lookouts are stationed in accordance with weather conditions, anticipated results, and physical limitations of personnel. At least one lookout shall be stationed in the bow as far forward and as near the water as

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feasible when underway during low visibility or when approaching or traversing congested traffic lanes or areas.

- (h) Require that electronic and other aids to safe navigation are used during low visibility and when otherwise needed.
- (i) Make use of effective devices for fixing the ship's position and ascertaining the depth of water when underway on soundings; when entering or leaving port; or upon approaching an anchorage, shoal, or rock, whether or not a pilot is on board. Speed should be reduced to permit the accurate operation of these devices when necessary.
- (10) Observe every precaution prescribed by law to prevent collision and other accidents.
- (11) Steam at a speed which will not endanger other ships or craft or property close to shore when underway in restricted waters or close to shore unless unusual circumstances prevent it.
- (12) Operate lights required by law to prevent collision. Make sure these lights are burning in all weather, from sunset to sunrise. Lights that burn out are to be replaced promptly.
- (13) Maintain a night order book for the OOD which shall contain the Commanding Officer's orders with respect to courses, special precautions concerning the speed and navigation of the ship, and all other orders for the night.
 - (14) When under the tactical command of a senior, give prompt notice to such senior and to any other endangered ships or aircraft if the directed course is leading into danger.
 - (15) When under tactical command of a senior, perform no independent evolution without orders from such senior, except when avoiding collision or other imminent danger.

(16) When anchoring:

- (a) Select a safe place to anchor.
- (b) Upon anchoring, record bearing and angles in the log to establish the exact position of the ship.
- (c) When the ship is anchored at a place which has not been surveyed, examine the depth of the water and character of the bottom to a distance from the anchor of at least one and one-half times the radius of the ship's swinging circle and record the results in the log.

(2) THE NAVIGATOR shall:

- (a) Be responsible, under the Commanding Officer, for the safe navigation of the ship as delineated in paragraph 323 of this ruction.
- (b) Be responsible for the training and performance of the Navigation and Piloting Details, including those for low visibility navigation.
- (c) Keep the Commanding Officer informed of all matters affecting the safe navigation of the ship.
- (3) ALL DEPARTMENT HEADS shall be responsible for the individual training and assignment of qualified personnel to the navigation details.
- (4) THE FIRST LIEUTENANT shall be responsible for the preparation and timely release of the anchor as ordered by the Commanding Officer.

e. SPECIAL MEASURES DURING LOW VISIBILITY

- (1) Regular watch stations will be augmented as listed in Table 6-1.
- (2) Special low visibility navigation details will be exercised frequently in clear weather, simulating low visibility conditions.
- (3) Condition ZEBRA modified will be set. The engineering plant may be operated split plant, depending on the orders of the Commanding Officer.

STATION	PERSONNEL	DUTIES
FORECASTLE	FOG LOOKOUT (OFFICER OR PO)	REPORT TO THE BRIDGE THE RELATIVE BEARINGS AND ESTIMATED RANGES ALL SOUNDS AND SIGHTS.
	TELEPHONE TALKER	RELAY INFORMATION BETWEEN LOOKOUT AND BRIDGE.
	ANCHOR DETAIL	STAND BY ANCHOR.
CHAINS	LEADSMAN (SN)	TAKE SOUNDINGS, AND REPORT TO THE BRIDGE.
FATHOMETER	OPERATOR (QM OR ST)	REPORT SOUNDINGS TO NAVIGATOR, AND RECORD.
FIRE CONTROL	GENERAL QUARTERS TEAM	TAKE RANGES AND BEARINGS AND REPORT.
SATNAV/GPS	OPERATOR (QM)	TAKE READINGS, AND REPORT TO NAVIGATOR AS DIRECTED.
CIC	GENERAL QUARTERS TEAM	MAINTAIN SHIP'S POSITION, AND REPORT TO BRIDGE. ASSIST FIRE CONTROL RADAR IN LOCATING DESIGNATED OBJECTS.
SURFACE LOOKOUT	REGULAR LOOKOUTS	REPORT TO THE OOD THE RELATIVE BEARINGS AND ESTIMATED RANGES OF ALL SIGHTS AND SOUNDS.
	TELEPHONE TALKERS (SN/SA)	RELAY ALL INFORMATION BETWEEN LOOKOUTS AND BRIDGE.

Table 6-1. Low Visibility Navigation Detail

630.14 REPLENISHMENT BILL

- a. PURPOSE. To set forth policies for assigning personnel to duties and stations; and to establish certain procedures for replenishing the ship at sea, transferring passengers and light freight, fueling, defueling, and the internal transfer of fuel, using either connected replenishment (CONREP) or vertical replenishment (VERTREP) as appropriate. Detailed casualty control procedures tailored to the specific unit must be issued and regularly rehearsed by the ship control team, comning officer, helmsman, ship control safety officer, engineering officer of the watch, after steering, and rig captains to ensure proficiency in the event of an emergency.
- b. RESPONSIBILITY FOR THE BILL. The First Lieutenant shall be responsible for this bill under the supervision of the Executive Officer.
- c. INFORMATION. NWP 14, Replenishment at Sea (NOTAL), provides the necessary doctrine for this evolution. Fueling and transfer of light cargo or personnel often occur simultaneously, but the handling of heavy cargo and ammunition is usually a separate operation. Although the rigging and stations differ with the type of replenishment operation, the personnel involved and the communications used are practically the same. Planning is necessary in order to anticipate problems of the varying characteristics of replenishment ships and by sea and weather conditions. NWP 14, Loading and Underway Replenishment of Nuclear Weapons (NOTAL), provides guidance for units handling nuclear weapons. For underway replenishment with allied units, refer to ATP 16, Replenishment at Sea (U) (NOTAL). OPNAVINST 5090.1A (NOTAL) provides additional environmental safeguards for fueling, defueling, internally transferring fuel, or handling other hazardous substances, as well as procedures to be followed should discharge of oil or other hazardous substance occur.

d. RESPONSIBILITIES

(1) THE EXECUTIVE OFFICER shall:

- (a) Coordinate the operation within guidance provided by the Commanding Officer.
- (b) Make sure that emergency breakaway procedures are reviewed with the other ship.
- (c) Make sure that the spill control detail is in a high state of readiness supported by exercises and drills and inspections of the equipment.

- (d) Establish time for replenishment detail to be set.
 - (2) THE OFFICER OF THE DECK shall:
- (a) Ascertain the time of the operation and the station(s) to be used.
- (b) Inform the department heads as early as possible and order the detail over all circuits of the announcing system.
- (c) Before going alongside, ensure that steering control in the pilot house and after steering is checked out in all modes of operation (except manual/hand crank). Check for gyro error and determine the operational status of the standby gyros and associated alarms.
- (d) Make sure that personnel assigned ship control functions are knowledgeable in the operation of equipment unique to their watch stations and that they are thoroughly familiar with casualty control procedures. Watch station personnel substitutions shall be kept to a minimum consistent with operational requirements, available resources and the elimination of fatigue. Training shall be conducted with qualified supervision only.
- (e) Make sure that correct visual signals are displayed during the approach and while alongside another ship.
- (f) Assist the conning officer in relaying orders to the helm and to the engine order telegraph and revolution indicator.
 - (g) Make sure that the smoking lamp is controlled.
- (h) Do not allow aircraft engines to be turned up while approaching or alongside another ship unless directed to do so by the Commanding Officer.
- (i) Upon receipt of a report of a discharge of oil or other hazardous substance:
 - 1. Call away the Spill Response Detail.
- 2. Notify the Commanding Officer, Executive Officer, OTC, and ships in company or alongside.
- 3. Establish communications with the Spill Response Detail.

- (j) Upon receipt of a line throwing announcement from the firing ship, such as, "On the (name of ship), standby for shot lines, all hands topside take cover," pass the word over the lMC, "On the (name of ship), standby for shotlines (port/starboard side, forward/aft/midships, all stations). All hands topside take cover." NWP 14 (NOTAL), Article 2.3.4.3 refers.
- (3) SHIP CONTROL SAFETY OFFICER may be assigned and shall:
- (a) Be stationed so that the helmsman and lee helmsman may be observed in the performance of their duties.
- (b) Make sure that he/she is knowledgeable in the operation of equipment associated with the helm and the lee helm and thoroughly familiar with casualty control procedures.
- (c) Ensure that after steering is kept continually informed of the progress of the evolution with particular attention to course and speed changes.
- (d) Make sure that the helmsman is advised when the approach ship crosses the control ship's wake and prior to tensioning and detensioning rigs in order to anticipate rudder requirements.

(4) THE FIRST LIEUTENANT shall:

- (a) Recommend which replenishment stations should be used.
- (b) Exercise general supervision over all rigging evolutions.
- (c) Keep the Executive Officer informed on the status of the rigging.
- (d) Make sure that designated emergency breakaway equipment is provided and that all personnel are trained in emergency breakaway procedures.
- (e) Make sure that spill response equipment is available to all transfer and fueling stations should a spill occur.
- (f) Make sure that a lifebuoy watch is stationed on each engaged side. The lifebuoy watch shall man sound powered phones, and have a 24-inch life ring with light.

- (g) Make sure the ready lifeboat and crew are standing by when there is no ship or helicopter in life guard station for rescue operations.
 - (5) THE ENGINEER OFFICER shall:
 - (a) Provide the fuel oil connections to be used.
- (b) Supervise the connecting and disconnecting of fuel oil hoses as necessary.
- (c) Supervise the internal handling and transfer of fuel oil.
 - (d) Supervise the pumping of fuel oil.
- (e) Inform the Commanding Officer, Executive Officer, First Lieutenant, OOD, and Supply Officer of the amount of fuel oil to be transferred or defueled.
 - (f) Steam with split plant whenever possible.
- (g) Make sure that engineering department watch station personnel are familiar with casualty control procedures that may be in effect while in a restricted maneuvering condition.
- (h) Supervise the proper operation and line-up of applicable fuel systems including:
- 1. Use fuel system line-up and operating check-off lists.
- $\underline{2}$. Double check fuel system valves to ensure proper system alignment.
- 3. Conduct continuous sounding of all fuel system tanks.
- 4. Isolate service suction tanks from the tanks being fueled or defueled.
 - 5. Secure all overboard fuel discharge points.
- <u>6</u>. Set topside watches at possible spill locations with direct communications to applicable fuel transfer control stations.
- (i) Publish procedures for terminating and cleaning up the spillage, as appropriate.

- (j) Make sure that equipment, fittings, and hoses have been tested and are working properly.
- (k) Before fueling, defueling, or transfer evolutions, report to the Commanding Officer that the ship is ready in all respects for fueling, defueling, or fuel transfer operations and that all equipment, hoses, and fittings have been tested and are properly working as required by applicable NAVSEA and NAVSUP directives.
- (1) Make sure that a draft before and after fueling is taken and reported to the OOD.
- (m) Keep the Commanding Officer, Executive Officer, and OOD informed of the progress and estimated time of completion of fueling, defueling, or internal fuel transfer operations.
- (n) Upon completion of the evolution, report to the Commanding Officer, Executive Officer, OOD, and the Supply Officer the amount of fuel oil received or transferred, the pumping rate, and the amount of fuel aboard.
- (o) During rearming or vertical replenishment (VERTREP) operations, make sure that fire hoses, charged to nozzle, are laid out to the replenishment station.
- (p) Perform all refueling functions normally assigned to the Air Officer when directed (for example, LAMPS or VERTREP detachment not assigned).
- (q) Make sure that personnel are assigned to repair sound-powered phones.

(6) THE AIR OFFICER shall:

- (a) Be responsible for handling and stowing aviation fuel hoses.
- (b) Supervise connecting and disconnecting aviation fuel hoses.
- (c) Supervise internal handling, fueling, defueling, and transferring of aviation fuels including:
- 1. Aviation fuel system line-up and operating check-off lists.
- 2. Double checking all aviation fueling system valves for proper system alignment.

- 3. Continuous sounding of aviation fuel system tanks.
- 4. Securing all overboard aviation fuel discharge points.
- 5. Setting topside watches at possible aviation fuel spill locations with direct communications to applicable aviation fuel transfer control stations.
- (d) Issue procedures for terminating and cleaning up the spillage.
- (e) Before refueling, make sure hoses and fittings are properly working and have been tested in accordance with applicable directives and instructions.
- (f) Before such operations, report to the Commanding Officer that the ship is ready to begin aviation fueling, defueling, or transfer and that all equipment hoses and fittings are properly working and have been tested as required by applicable directives and instructions.
- (g) Control flight deck evolutions incident to maneuvers of the helicopter during VERTREP.
- (h) Supervise the pumping of aviation fuel to another ship.
- (7) THE OFFICER IN CHARGE OF A FUELING OR TRANSFER STATION shall:
- (a) Direct the personnel in their respective stations following instructions of the First Lieutenant.
- (b) Make sure that phones to the bridge are manned and that accurate information from each station is transmitted to the bridge.
- (c) Make sure that station personnel understand their emergency breakaway assignments.
- (d) Make sure that safety precautions are observed and personnel wear required life jackets and protective clothing.
- (e) Discuss emergency breakaway procedures with the other ship.

- (8) THE MEDICAL DEPARTMENT REPRESENTATIVE shall station qualified medical department personnel to provide first aid.
- (9) THE WEAPONS OFFICER (OR COMBAT SYSTEMS OFFICER IF THE UNIT HAS A COMBAT SYSTEM DEPARTMENT) shall:
- (a) Exercise general supervision over the handling of line-throwing guns.
- (b) Supervise transferring, handling, and stowing of ammunition items.
- (c) Enforce all safety precautions for handling ammunition.
- (d) Properly and expeditiously stow or strike down ammunition.
- (10) THE SUPPLY OFFICER shall be responsible for organizing, stationing, and supervising personnel employed in receipt, handling, and disposition of supplies, provisions, equipment, and material under his/her cognizance; and make sure that provisions are properly stowed.

(11) APPROPRIATE DIVISION OFFICERS shall:

- (a) Assign personnel who have been trained in safety precautions and emergency procedures to duty stations.
- (b) Assign personnel to the ship's 1JV and ship-to-ship sound-powered phones.
- (12) THE OPERATIONS OFFICER shall ensure that oil and hazardous pollution spill reports required by OPNAVINST 5090.1A (NOTAL) are submitted (OPNAV 5090-2 and OPNAV 5090-3 apply).
 - (13) The OCEANOGRAPHY OFFICER, when assigned, shall:
- (a) Provide a thorough briefing of forecasted weather and sea conditions for the planning of underway replenishment operations.
- (b) Ensure that adequately trained weather observation personnel are stationed during underway replenishment operations.

e. COMMUNICATIONS

(1) The primary internal and ship-to-ship communications during fueling or transfer operations are:

- (a) lJV Bridge to all transfer and fueling stations.
- (b) XlJV Bridge to engineering control, steering aft, switchboard, and forward and after gyros.
- (c) 4JV Fuel oil and JP fuel transfer stations to associated engineering control stations.
- (d) 3JG Gasoline transfer station to associated gasoline control stations (air department).
 - (e) Bridge-to-bridge circuit.
- (f) Station-to-station circuit between transfer or fueling stations of the two ships.
- (2) Available circuits will vary among ship types because of the number of outlets involved and the dissimilar information passed over the circuits.
- f. ADDITIONAL INFORMATION. Each unit shall add additional instructions as necessary. As a minimum, these instructions shall include a spill control detail to meet local requirements under OPNAVINST 5090.1A (NOTAL) and applicable Fleet Commander in Chief and Type Commander directives. Procedures for using sinking agents, dispersants, and other pollution abatement equipment and materials shall be included.

630.15 RESCUE AND ASSISTANCE BILL

- a. PURPOSE. To organize qualified personnel within each duty section or the entire unit to render emergency assistance to persons or activities outside the unit without lowering the unit's security below acceptable standards.
- b. RESPONSIBILITY FOR THE BILL. The Engineer Officer shall be responsible for this bill under the supervision of the Executive Officer.
- c. INFORMATION. The nucleus of personnel assigned to duties within this bill shall consist of those ratings that are best qualified for rescuing personnel from the water, assisting another unit in distress, and assisting persons or activities in distress ashore. The security of the unit shall be the paramount consideration when dispatching rescue and assistance details away from the unit. Search and rescue doctrine is in NWP 19-1 (NOTAL). The water rescue portion of this bill contains the general procedures and responsibilities of shipboard personnel in recovering one or more persons from the water.

d. PROCEDURES AND RESPONSIBILITIES

(1) THE EXECUTIVE OFFICER shall:

- (a) Make sure the assistance detail is maintained in a high state of readiness through frequent exercises and drills and inspection of their equipment.
- (b) Coordinate all departments in matters involving the assistance detail.

(2) DIVISION OFFICERS shall:

- (a) Assign qualified personnel for the duties designated in this bill.
- (b) Maintain equipment required in execution of this bill in a ready and accessible condition.
- (c) Post assignments to the rescue and assistance detail on the division watch, quarter, and station bill.
- (3) THE DAMAGE CONTROL ASSISTANT shall maintain custody of the rescue and assistance chests and ensure that they are ready and accessible.

- (4) THE OFFICER IN CHARGE OF THE RESCUE AND ASSISTANCE DETAIL shall:
- (a) Receive the muster report from the enlisted assistant whenever the detail is called away.
- (b) Direct the assistance detail in their duties while cooperating with the responsible authority in units or activities being assisted.

e. ORGANIZATION AND EQUIPMENT

(1) PERSONNEL. The organization of the rescue and assistance details shall be as required by the Type Commander.

(2) ACTION OF PERSONNEL

- (a) All personnel assigned to the detail shall muster with prescribed equipment.
- (b) The officer in charge shall muster the party and select personnel and equipment to meet the particular emergency.
- (c) The rescue detail shall be augmented as necessary.
- (d) The officer in charge shall establish communications with the OOD.
- (e) The crews of boats called away shall man their boats and prepare them for lowering. Boats shall be lowered on orders from the OOD and shall make the designated accommodation ladder for loading and further instructions.
- (f) Officers in charge shall be in command of their boats and shall direct the unit at the scene of the emergency.
- $\mbox{(g)}$ Visual and/or voice communications shall be maintained with the parent unit.
- (3) BOATS. If available, at least one motor whaleboat shall be prepared for lowering at all times, both at sea and in port. Motor whaleboats or other boats shall be used by the rescue and assistance details, as appropriate.

There shall be at least one complete boat crew, designated by the First Lieutenant, available at all times when underway for the use of the assistance detail. In port, available boats and crews shall be used.

- (4) RESCUE AND ASSISTANCE CHESTS. Rescue and assistance chests shall contain equipment designated in NWIP 62-1 (NOTAL) and any additional related equipment. The contents of the chest shall be listed on the outside of it. Equipment is listed on an allowance equipage list (AEL) in the ship's Consolidated Ship's Allowance List (COSAL).
- (5) SPECIAL RESCUE CHESTS. Chests containing ship deck recovery equipment and rescue boat equipment shall follow Tables 6-2 and 6-3. Other special rescue chests shall contain type commanders' designated equipment with contents listed on the outside. Additional related equipment may be included. Equipment is listed on an allowance equipage list (AEL) in the ship's COSAL.
- f. THE RESCUE AND ASSISTANCE DETAIL. The rescue and assistance detail shall be employed within the following general guides:
- (1) PLANE CRASHES IN THE VICINITY OF THE SHIP shall be treated as man overboard at sea or in port. The following considerations shall be included:
- (a) A ship engaged in duties as lifeguard/plane guard or safety shall maintain the rescue detail on deck during flight operations and be prepared to rescue personnel either by boat or ship pickup.
- (b) Rescue and assistance equipment listed Table 6-4 should be included in the boat equipment used for rescuing aircraft personnel. (NWP 19-1 NOTAL)
- (c) When ship pickup is made, the detail shall be augmented by personnel from designated repair stations.
- (d) Rescue and assistance procedures for plane crash shall be initiated by passing the word: "PLANE CRASH. STARBOARD (PORT) SIDE. SECTION 1 (2) (3)."
- (2) IN CASES OF DISTRESS in another ship or distress ashore the following considerations apply:
- (a) In port the rescue and assistance detail may be augmented by personnel on board as circumstances require and security permits. The Executive Officer, or in his/her absence the CDO, shall effect such augmentation.
 - (b) At sea the rescue and assistance detail shall be augmented by the personnel of one designated damage control.

QUANTITY	DESCRIPTION	
1	BOAT HOOK	
2	GRAPPLING HOOKS 7 LB, 100 FEET, 1/4-INCH DIAMETER NYLON LINE SPLICED TO CHAIN	
1 ,	SHEARS, MATERIAL CUTTING HAND	
1	KNIFE, HOOK BLADE OR J-KNIFE-NSN 1R1670-01-088-4654-LX	
1	HATCHET OR AXE	
2	BATTLE LANTERNS	
5	FLASHLIGHTS	
1	RADIO, SET (HAND HELD)	
1 (SET)	SEMAPHORE FLAGS	
1	HANDHELD SIGNAL LIGHT	
1	FIRST AID KIT WITH AIR WAY	
1	BOARDING LADDER	
1	VERY PISTOL WITH RED-WHITE-GREEN FLARES	
1	M-14 RIFLE AND BANDOLIER OF AMMUNITION	
1	BLANKETS	
1	LITTER, SEA AIR RESCUE (MEDEVAC)	

Table 6-2. Boat Rescue Equipment

QUANTITY	DESCRIPTION
2	J-BAR DAVITS (500 LB SWL MINIMUM PER NAVSHIPS DRAWING 8051645271 REV. D) RIGGED WITH 2 2-INCH CIRCUMFERENCE NYLON VANG GUYS, LOCATED P/S, ONE EACH DESIGNATED RECOVERY STATION. EQUIPPED WITH A SNATCH BLOCK AND 3-INCH MINIMUM CIRCUMFERENCE BY 20 FATHOM NYLON HOISTING LINE WITH A DOUBLE RESCUE HOOK. (CLUSTER OF 3 CHEM LIGHTS TO IDENTIFY RESCUE HOOK DURING NIGHT USE-(9Z 4030-00-863-8546.) NORMALLY RIGGED AT ALL TIMES WHEN UNDERWAY. NOTE: THE NOMINALLY RATED 500 LB UNIT CAN SAFELY HANDLE A TWO-MAN LIFT IF NECESSARY.
2	EMBARKATION NETS/LADDERS, ONE EACH PORT AND STARBOARD STATION, LONG ENOUGH TO REACH THE WATER AT SHIP'S LIGHT LOAD LINE, RIGGED WITH 4 × 4s AT VARIOUS INTERVALS (EXCEPT THE BOTTOM) TO PREVENT CURLING AND 1-1/2-INCH CIRCUMFERENCE NYLON SURGE LINES LONG ENOUGH TO ACCOMMODATE FREE BOARD OF SHIP, SECURED TO BOTTOM "D" RINGS TO REDUCE FORE AND AFT MOVEMENT OF THE NET. TWO 50-POUND SANDBAGS FITTED WITH SNAP HOOKS FOR ATTACHING TO THE BOTTOM OF THE NET TO KEEP IT SUBMERGED. ADEQUATE NUMBER OF CHEM LIGHTS AVAILABLE TO GUTLINE THE SIDES AND BOTTOM OF THE NET. NORMALLY RIGGED AT ALL TIMES WHEN UNDERWAY.
1	STOKES LITTER WITH FLOTATION, HOISTING SLINGS, AND TRAIL LINE ASSEMBLIES.
2	HEAVING LINES, 100 FEET LONG, WITH YELLOW MONKEY FISTS (CHEM LIGHT AVAILABLE TO ATTACH NEAR FIST FOR NIGHT USE).
6	HEAVING LINES, 100 FEET LONG WITH INTERNATIONAL ORANGE PLASTIC BALL (NSN 4020-01-344-0552) (CHEM LIGHT AVAILABLE TO ATTACH NEAR BALL FOR NIGHT USE)
1	SHEARS, MATERIAL, HANDCUTTING.
1	RESCUE KNIFE, V-BLADED
2	PORTABLE DC FLOOD LIGHTS.
2	GRAPPLING HOOKS (7 LB, 100 FEET, 3/4 INCH DIAMETER LINE SPLICED TO CHAIN).
2	SAFETY HARNESS AND INHERENTLY BUOYANT LIFE JACKET WITH BUTTON HOLE IN BACK FOR SAFETY HARNESS "D" RING.
2	RESCUE STROP (HORSE COLLAR)
2	FIRST AID KIT.
2	BLANKETS (ADDITIONAL AS REQUIRED.)
1	RESUSCITATOR (MANUAL).
1	GUN, M-14, AND BANDOLIER OF AMMUNITION.
2	24 INCH LIFE-RING WITH LINE ATTACHED, LENGTH TO SUIT FREE BOARD OF SHIP (CHEM LIGHTS AVAILABLE TO ATTACH TO LIFE-RING FOR NIGHT USE).
1	MEGAPHONE, PORTABLE BATTERY OPERATED.

Table 6-3. Ship Deck Recovery Equipment

QUANTITY	DESCRIPTION
1	WET SUIT ENSEMBLE
1	WRAP-AROUND MASK (WITH CHEMICAL LIGHT ATTACHMENT)
1	SNORKEL WITH FLEXIBLE MOUTHPIECE
1 PR	ROCKET JET FINS
1	UDT LIFE VEST
1	SWIMMER'S HARNESS COMPLETE WITH TWO 4" AND TWO 6" CHEMICAL LIGHTS, ONE SDU-5E STROBE LIGHT, ONE "J" KNIFE, AND A WHISTLE ALL ATTACHED.
1	SWIMMER/SURVIVOR TENDING LINE, POLYPROPYLENE 800 POUND TEST. 300 YARDS LONG, EQUIPPED WITH COMPACT REEL AND A QUICK RELEASE HOOK FITTED ON THE END ATTACHING TO HARNESS.

Table 6-4. Rescue Swimmer Equipment (For Both Ship and Boat Rescue Swimmer)

repair station as circumstances require and fighting conditions permit.

- (c) Rescue and assistance procedures shall be initiated by passing the word: "AWAY THE RESCUE AND ASSISTANCE DETAIL. SHIP IN DISTRESS (DISTRESS ASHORE). SECTION 1 (2) (3)."
- (3) RESCUE OF A LARGE NUMBER OF SURVIVORS will be carried out as stated in the Rescue of Survivors bill.
- (4) IN CASES OF REQUESTS FOR ASYLUM OR TEMPORARY REFUGE, the following procedures apply:
- (a) On the high seas or in territories under exclusive U.S. jurisdiction, at his or her request, an applicant for asylum or temporary refuge will be received on board. Under no circumstances shall the applicant be surrendered to foreign jurisdiction or control, unless at the direction of the Secretary of the Navy or higher authority.
- (b) In territories under foreign jurisdiction, temporary refuge shall be granted for humanitarian reasons and only in extreme or exceptional circumstances wherein life or safety of the applicant is put in imminent danger. A request by foreign authorities for return of custody of the applicant under protection of the temporary refuge will be reported to the Chief of Naval Operations or the Commandant of the Marine Corps. The requesting foreign authorities will be informed that the case has been referred to higher authorities for instructions. When temporary refuge has been granted, it will be terminated only when directed by the Secretary of the Navy or higher authority. While temporary refuge can be granted in these circumstances, permanent asylum will not be granted.
- (c) Foreign nationals who request assistance in forwarding requests for political asylum in the United States will not be received on board, but will be advised to apply in person at the nearest American Embassy or Consulate. If a foreign national is already onboard, however, such person will not be surrendered to foreign jurisdiction or control unless at the personal direction of the Secretary of the Navy or higher authority.

630.16 RESCUE OF SURVIVORS BILL

- a. PURPOSE. To organize qualified ship's personnel for rescuing large numbers of survivors from the water.
- b. RESPONSIBILITY FOR THE BILL. The Weapons Officer, under the supervision of the Executive Officer, is responsible for this bill.
- c. INFORMATION. Rescue of a large number of survivors shall be accomplished by the rescue of survivors detail augmented as necessary by personnel from all repair parties.

d. RESPONSIBILITIES

- (1) THE EXECUTIVE OFFICER SHALL:
 - (a) Coordinate rescue operations.
- (b) Ensure a high state of readiness of the rescue of survivors detail through frequent exercises and drills.
- (2) Heads of Departments shall ensure that qualified personnel are assigned from each watch section to stations and duties.

(3) DIVISION OFFICERS shall:

- (a) Assign qualified personnel from each watch section to duties and responsibilities for equipment. In assigning personnel, he/she shall consider the possibility that the rescue of survivors detail may be called away while the ship is at general quarters.
- (b) Post assignments to duty on the Watch, Quarter, and Station Bill.

(4) THE FIRST LIEUTENANT shall:

- (a) Train personnel assigned to the rescue of survivors detail.
 - (b) Take charge of rescue operations on deck.
- (c) Ensure the availability and maintenance of deck equipment.

- (5) THE DAMAGE CONTROL ASSISTANT shall:
- (a) Assist the First Lieutenant in rescue operations on deck.
- (b) Ensure the availability and maintenance of engineering equipment.
 - (6) THE SUPPLY OFFICER shall:
 - (a) Feed survivors as directed.
- (b) Receive valuables and personal possessions from survivors for safe keeping.
- (7) THE EXECUTIVE OFFICER or designated department head shall assign temporary bunks to survivors.
- (8) THE SECURITY OFFICER/CMAA shall coordinate special security requirements.
 - (9) THE OPERATIONS OFFICER SHALL:
- (a) Ensure communications equipment and operators are trained in appropriate verbal and recorded message traffic procedures related to the rescue of survivors.
- (b) Ensure the availability and maintenance of communication equipment related to the rescue of survivors.

e. PROCEDURES

- (1) Survivors shall be brought on board by J-bar davits, cargo nets, knotted lines, Jacob's ladders, or any other method available. Swimmers shall be equipped in accordance with Table 6-4 and be prepared to enter the water to assist injured or exhausted personnel.
- (2) As survivors are recovered from the water, they shall be identified, cleansed of oil, bathed, and examined by the medical staff, the sequence being dictated by the physical condition of each survivor.
- (3) The Executive Officer shall coordinate with designated department heads to ensure berthing assignments are made in such a manner that as far as possible, all survivors remain in a group.

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- (4) Valuables or other personal possessions shall be tagged and placed in the custody of the Supply Officer. Oilsoaked clothing shall be weighted and thrown overboard.
- (5) Rescue of survivors procedure shall be initiated by passing the word "AWAY THE RESCUE OF SURVIVORS DETAIL. RESCUE SURVIVORS. SECTION 1 (2) (3)."
- (6) When the rescue of survivors detail is called away and the ship is at general quarters, personnel shall not leave their battle stations until released by control officers.

630.17 EQUIPMENT TAG-OUT BILL

- a. PURPOSE. To establish fundamental requirements for a standardized and disciplined method of equipment isolation and de-energization. This bill establishes the Tag-out Users Manual (NAVSEA S0400-AD-URM-010/TUM) as the primary reference for establishing, maintaining, enforcing and training of tag-out program and tag-out processes used in all naval ships and craft. The Tag-out Users Manual provides:
- (1) A procedure, using standard tags and forms, to provide for personnel and ship safety, and prevent damage to equipment when a system, or portion of a system, is in an abnormal lineup or in an abnormal condition.
- (2) A procedure, using standard tags and forms, to provide temporary special instructions or to indicate that unusual action must be exercised to operate equipment.
- (3) A procedure, using standard labels, to identify installed instruments or gages that are unreliable or not in normal operating condition.

b. RESPONSIBILITIES

- (1) The Commanding Officer/Officer in Charge is required to ensure that all persons within the command know applicable safety precautions and procedures and to ensure that all persons performing work or testing do so in compliance with this bill. Department Heads are responsible for ensuring that personnel assigned understand and comply with the procedures of this bill. The ship is responsible for ensuring the adequacy and accuracy of all tag-outs of ship's systems and components, and will control the tagged-out systems and/or components being isolated, unless the system or component is formally transferred to the repair activity.
- (2) A repair activity is responsible for ensuring the establishment of safe conditions under which repair activity personnel perform all work. The repair activity is responsible to ensure that all persons concerned know applicable safety precautions and procedures.
- c. APPLICABILITY. This tag-out bill and the associated Tag-out Users Manual are applicable to all activities performing work

aboard naval ships and craft, including new construction and decommissioned ships.

- d. STANDARD TAG-OUT REQUIREMENTS. To ensure continuous respect for tag-out isolations in support of personnel, equipment, and ship safety, strict enforcement of tag-out procedures is required by the ship and the repair activity. The procedures of the Tag-out User's Manual are mandatory to standardize tag-out processes. These procedures incorporate the following fundamental tag-out principles:
- (1) Two persons shall independently confirm the adequacy and accuracy of the proposed isolation. Appropriate references shall be used to ensure complete isolation of the system, piping, or electrical circuit, and to prevent operation of the system or component from all stations that could exercise control.
- (2) A person designated by the Commanding Officer/Officer in Charge as the Authorizing Officer, shall review the proposed tag-out and when satisfied, sign to signify approval of the adequacy and accuracy of the tag-out.
- (3) For Repair Activity work, a Repair Activity Representative shall sign indicating repair activity concurrence with the tag-out.
- (4) Specific authorization shall be provided by the Authorizing Officer to attach tags. Two persons shall independently verify that the component is in the required position or condition and that the tag is properly attached to the correct component.
- (5) When tag-out isolation is no longer required, the Authorizing Officer shall provide specific authorization to remove tags. For tag-outs requested by the repair activity, a Repair Activity Representative shall sign indicating repair activity concurrence with tag removal.
- (6) Components may not be operated or removed when tagged with a danger tag.
- (7) A record of all active tag-out actions shall be maintained and available for review.

- e. ENFORCEMENT. The tag-out program shall be audited to ensure compliance with all Tag-out User's Manual requirements. At a minimum, audits will validate:
 - (1) Tags and labels are correctly installed.
- (2) Component position agrees with the position specified on the tag.
- (3) Identified deficiencies are corrected in a timely manner to ensure personnel, ship, and equipment safety.
- f. TRAINING. Personnel assigned to prepare tag-outs, review tag-outs, attach tags, remove tags, check tags, position components, or perform tag-out program audits shall be qualified for these duties, and knowledgeable of the involved systems/components. All newly reported personnel not previously qualified shall receive indoctrination training on the tag-out program.

PAGES 6-167 THROUGH 6-192 HAVE BEEN REMOVED.

SECTION 630.18 BEGINS ON PAGE 6-193

.32C OPNAVINST

DANGER



DO NOT OPERATE

OPERATION OF THIS EQUIPMENT WILL ENDANGER PERSONNEL OR HARM THE EQUIPMENT. THIS **EQUIPMENT SHALL NOT BE OPERATED UNTIL THIS** TAG HAS BEEN REMOVED BY AN AUTHORIZED PERSON.

NAVSHIPS 9890/8 (REV. 3-70) (BACK)

± U.S. GOVT, FTQ, OFF.: 1981-708-143

SYSTEM/COMPONENT/RDENT/FICATION	 DATE/TIME
POSITION OR CONDITION OF ITEM TAGGED	-



SERIAL NO

DANGER

DO NOT OPERATE

SIGNATURE OF PERSON ATTACHENG TAG	SIGNATURE OF PERSONS CHECKING TAG
SIGNATURE OF AUTHORIZING OFFICER	SIGNATURE OF REPAIR ACTIVITY REPRESENTATIVE
NAVSHIPS 9490/8 (REV. 3-70) (FRONT)	S/N 0105-LF-841-8001

Figure 6-11. DANGER Tag

Enclosure

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authorized in paragraph 630.17g(1)(b)2) or removed when tagged with DANGER tags.

- (4) ENGINEERING OFFICER OF THE WATCH (EOOW). The EOOW may be either the engineering officer of the watch or the engineering duty officer, depending on engineering plant conditions.
- (5) OFFICER OF THE DECK (OOD). The OOD may be either the OOD Underway or the ship's Command Duty Officer (CDO) depending on ship's condition.
- (6) OUT OF CALIBRATION LABELS. (See Figure 6-12, NAVSEA 9210/6). Out of Calibration Labels are ORANGE labels used to identify instruments that are out of calibration and will not accurately indicate parameters. This label indicates that the instrument may be used only with extreme caution.
- (7) OUT OF COMMISSION LABELS. (See Figure 6-13, NAVSHIPS 9890/7). Out of Commission Labels are RED labels used to identify instruments that will not correctly indicate parameters because they are defective or isolated from the system. This label indicates that the instrument cannot be relied on and must be repaired and recalibrated or be reconnected to the system before use.
- (8) REPAIR ACTIVITY. A Repair Activity is any activity other than the ship's force involved in the construction, testing, repair, overhaul, refueling, or maintenance of the ship.
- (9) REPAIR ACTIVITY REPRESENTATIVE. The Repair Activity Representative is the shop supervisor or equivalent of the repair activity shop performing work which requires a tag-out.
- (10) SHIP's FORCE. Personnel assigned to the ship who are responsible for maintenance and operation of ship's systems and equipment are termed ship's force.
- (11) TAG-OUT LOG. A Tag-out Log is the control document for administering tag-out procedures (other than those required in the performance of designated PMS maintenance actions see paragraph 630.17h). The format of the Tag-out Log is described in paragraph 630.17d(3).
- (12) WORK CENTER REPRESENTATIVE. The work center representative is normally the petty officer in charge of a specific work item or the work center supervisor of the work center performing the work item. Where a work center representative signature is required by this bill, the signature

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	•	CORRECTION	

Figure 6-12. Out of Calibration Label

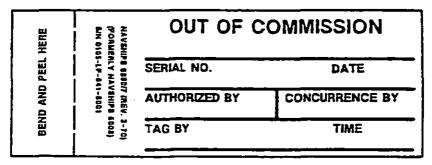


Figure 6-13. Out of Commission Label

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also may be made by the authorizing officer or a superior in the performing work center supervisor's chain of command who has personal knowledge that the work item is complete.

d. TAG-OUT LOGS AND RECORDS

- (1) The number of Tag-out Logs maintained on a ship will depend on ship size. For example, a minesweeper may require only one Tag-out Log for the whole ship, while a major surface combatant may require a separate log for each major department. Individual force commanders shall specify the numbers of logs to be maintained for various ship classes, and where the logs are to be maintained. Nuclear-powered ships shall maintain a separate Tag-out Log for each propulsion plant in addition to any other ship Tag-out Logs. The Propulsion Plant Tag-out log is supervised by the EOOW (Propulsion Plant Watch Officer on CVN) and used for propulsion plant systems and equipment as well as other systems and equipment in the engineering spaces under the cognizance of propulsion divisions. This log is maintained in the Maneuvering Area or the Enclosed Operating Space, as applicable.
- (2) EXCHANGE OF INFORMATION. On ships maintaining more than one Tag-out Log, an exchange of information concerning tag-out actions will be required among Authorizing Officers. When a tag-out will affect another Authorizing Officer, the initiating party will obtain verbal concurrence from that officer(s) to tag-out the system or equipment in question before the tag-out is authorized. Examples of systems that require such coordination are ship service electrical distribution, hydraulics, air, ventilation, and air conditioning chill water systems.
- (3) FORMAT OF THE TAG-OUT LOG. This log is a record of authorization of each active tag-out action and will contain the following information:
- (a) A copy of this bill and any amplifying directives for administering the system shall be maintained in the log.
- (b) DANGER/CAUTION Tag-out Index and Record of Audits (Index/Audit Record) A sequential list of all tag-outs issued to provide a ready reference of existing tag-outs, to ensure that serial numbers are sequentially issued. A sample index is provided as Figure 6-14 (OPNAV 3120/4). Index pages with a few uncleared items remaining on old pages may be consolidated onto one index page. These old index pages and those with all tag-outs listed as cleared may be removed by the cognizant department head.

Enclosure (1)

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	DANGER/CAUTION TAG-OUT INDEX AND RECORD OF AUDITS							
LOG SERIAL	DATE	TYPE (DANGER/CAUTION)	DESCRIPTION (BYSTEM, COMPONENT, WORK PERMIT OR TEST DOCUMENT REFERENCE)	DATE CLEARED				
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OPNAV 3120/			8/N 0107-LF-031-2040	<u></u>				

Figure 6-14. DANGER/CAUTION Tag-Out Index and Record of Audits

- (c) Active DANGER/CAUTION Tag-out Record Sheets (Figure 6-15, NAVSEA 9210/9) All tags associated with tag-out of systems and/or components for the stated reason(s) are logged on one DANGER/CAUTION Tag-out Record Sheet to facilitate identifying all tags associated with the stated reason(s). All active sheets are kept in one section of the log. The Record Sheets are used as described in paragraphs 630.17.f(1) and (2).
- (d) Instrument Log (Figure 6-16, NAVSHIPS 9890/10) The Instrument Log is a sequential listing of all out-of-commission and out-of-calibration instruments which provides a ready index of existing OUT-OF-CALIBRATION (Figure 6-12) and OUT-OF-COMMISSION (Figure 6-13) labels. Instrument Log sheets are used as described in paragraph 630.17.f(3).
- (e) Cleared DANGER/CAUTION Tag-out Record Sheets Sheets that have been cleared and completed as specified in paragraph 630.17.f(2) are transferred to this section of the log until reviewed and removed by the cognizant department head.
- e. INFORMATION. A tag-out procedure is necessary because of the complexity of modern ships and the cost, delays, and hazards to personnel which could result from improper operation of equipment.
- (1) The tag-out procedure shall be enforced at all times. It is necessary during normal operations, as well as during construction, testing, repair, or maintenance. Strict enforcement of tag-out procedures is required by the ship's force and by the construction, maintenance, overhaul, or repair activity to ensure continuous respect for all tags.
- (2) The use of tags or labels is not a substitute for other safety measures such as chaining or locking valves, removing fuses, or racking out circuit breakers. However, tags should be attached to the fuse panel, racked out circuit breaker cabinet, or locked valve to indicate such action. When procedures or plans require the use of a locking device during normal operation, the use of tags is not required.
- (3) Tags will be used to indicate presence of and requirements for freeze seals, blank flanges, or similar type safety devices. When equipment or components are placed out of commission, such as by disconnecting electrical leads, providing jumpers, or pulling fuses for testing or maintenance purposes, tags shall be used to control the status of the affected equipment.

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APPLICABLE DOCUMENTATION	TAG	DATE/ TIME	PETTY OFFICER IN CHARGE	AUTHORIZING OFFICER	WCS/POIC	APLETE
E., JOB ORDER, RIP - OUT, S/P, ETC) NUMBER & TITLE	NUMBERS USED	ADDED	SECOND PERSON (SIGNATURE)	REPAIR ACTIVITY REP. (WHEN APPROP)	REPAIR ACTIVITY REP. (WHEN APPROP)	DATE
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Figure 6-15. DANGER/CAUTION Tag-Out Record Sheet

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IGNATUR	RE OF WATCH OF	FICER/DUTY OFFIC	CER		DATE/TIME	<u> </u>	CONTINUE	D ON ADDITIO	NAL CARL

Figure 6-15. DANGER/CAUTION Tag-Out Record Sheet (Cont.)

NAVSHIPS 9890/10 (REV.7-67)

(Formerly NAVSHIPS 5011-N/S-0105-642-0100

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LABEL CONDITION CODE AND NO.	DATE/TIME Labeled	instrument Name or Number	CONDITION AND/OR CORRECTION FACTOR	authorized by (signature)	ATTACHED BY Initials	WORK NECESSARY 10 CLEAR	DATE/TIME CLEARED	CLEARANCE AUTHORIZED BY ISIGNATURE)	LABEL REMOVED BY UNITIALS)
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LABEL CONDITION CODE: OCC - OUT OF COMMISSION CAL - OUT OF CALIBRATION LINE OUT COMPLETE ENTRIES

Figure 6-16. Instrument Log

- (4) Tags or labels associated with the tag-out procedures shall never be used for valve identification, for marking leaks, or for any purposes not specified in these tag-out procedures.
- (5) With the exception of laminated tags used for designated PMS Maintenance in non-nuclear surface ships/craft and non-nuclear, non-propulsion areas of nuclear powered surface ships (see paragraph 630.17.h), tags and labels shall not be laminated to accommodate repeated use since reuse of the same tag or label is not consistent with this procedure.
- (6) The absence of a tag or label is not to be construed as permission for unauthorized operation of equipment.
- (7) Whenever a tag or label is issued, appropriate action should also be initiated to remedy the situation requiring the tag or label so that it can be removed as soon as possible.
- (8) This procedure is designed for use with equipment and systems which are not in construction phases (that is, for equipment and systems turned over to the ship's force). However, the provisions of this procedure should be used to the maximum extent practical with systems and equipment under construction.
- . (9) When work is being accomplished by an intermediate level maintenance activity on equipment or systems that are the responsibility of the ship's force, the procedures of this instruction will be used. If a ship is under construction or assigned an availability to a repair activity not under the control of the Type Commander, then the assigning and removing of tags or labels may require agreement between ship's force and the repair activity. In this case, the following guidelines should be used:
- (a) For work on nuclear powered ships, the procedures of this bill will be used, modified as necessary to meet the requirements of NAVSEA documents such as the Manual for Control of Testing and Plant Conditions, NAVSEA 0989-028-5000 (NOTAL), and the Manual for the Control of Testing and Ship Conditions, NAVSEA 0905-485-6010 (NOTAL), where applicable.
- (b) For work on other ship's systems or equipment, the tag-out system should be formal in nature and familiar to both the repair activity and the ship's force.
- (10) Any person having knowledge of a situation requiring tags or labels should request that they be issued and applied. Locally generated check lists should be used to aid this procedure such as check lists for "men working aloft" "divers over the side", or "Dress Ship" conditions.

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- (11) Known requirements for using labels should be specified, when necessary, in installation procedures, test procedures, work permits (ripouts or reentries), or system turnover agreements.
- (12) The decision as to whether an OUT-OF-COMMISSION or an OUT-OF-CALIBRATION Instrument label is used must be made on a case basis. In general, if the Instrument error is small and consistent, an OUT-OF-CALIBRATION label may be used and the operation may continue to use the Instrument for plant/equipment operation. When an OUT-OF-COMMISSION label is used, the instrument should not be used for plant/equipment operation. When an OUT-OF-CALIBRATION label is used, the magnitude, sign, and units of the required correction should be marked on the label. When an entire system is placed OUT-OF-COMMISSION, it is not necessary to put OUT-OF-COMMISSION labels on all instruments associated with the system.
- (13) Enough tags shall be used to completely isolate the section of piping or circuit being worked on or to prevent operation of a system or component from all stations which could exercise control. System diagrams or circuit schematics shall be used to determine the adequacy of all tag-out actions.
- (14) Careful planning of tag-outs can significantly reduce the number of Record Sheets and tags and the effort required to perform audits, particularly during periods of overhaul or repair. For example, if a system and the equipment serviced by the system can be effectively isolated and tagged-out at its boundaries, with other systems such that several different work items can be performed within the boundaries, then only one Tag-out Record Sheet and associated tags would be required for the work within the boundaries. When the tag-out is initiated, all known work items should be included in the "Operations/Work Items included in Tag-Out" section. If work items are added to a Tag-out Record Sheet subsequent to initial issue of the Record Sheet, the following action shall be taken:
- (a) If no additional tags are required for the new work, the Authorizing Officer and, if required, the repair activity representative will ensure that work is consistent with the purpose of the tag-out and will ensure that the new work is fully described in the "Operations/Work Items Included in Tag-Out" section of the Record Sheet, and that the reason for the tag-out, the hazards involved, amplifying instructions, and work necessary to clear tags on the Record Sheet also reflect the added work. After making a thorough review to ensure the completeness and accuracy of the existing tag-out as would be required to initiate a new Tag-out Record Sheet for the added

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work, the Authorizing Officer (and repair activity representative) will sign the appropriate blocks next to the added work item.

- (b) If additional tags are needed to provide sufficient isolation for the work to be added, then the procedure in paragraph 630.17f(1)(i) must be followed. It must be recognized that in cases where the work to be added to a tag-out includes work on a presently tagged component, then additional tags providing isolation for all work must be added to the Tag-Out Record Sheet, issued, and installed prior to removing the tag from the tagged component associated with the added work.
- (15) When iterative inspections and/or adjustments are required by a Repair Activity specifically in support of testing or maintenance evolutions, an on-scene Authorizing Officer may be assigned by the Commanding Officer to administer the associated repetitive tag-outs. Examples of such evolutions include weapons elevator operability testing requiring numerous inspection points and steam driven propulsion plant equipment testing requiring iterative adjustments of balance valves, speed limiting governors, over-speed trips, etc., which require repetitive isolations. On-scene administration of such tag-outs will be accomplished as follows:
- (a) A DANGER/CAUTION Tag-out Record Sheet (NAVSEA 9210/9) dedicated to the specific test or maintenance procedure will be prepared. The DANGER/CAUTION Tag-Out Record Sheet will include multiple work items for equipment isolation over several iterations. Multiple sets of tags will also be prepared in advance for the isolation corresponding to the multiple work items in the DANGER/CAUTION Tag-Out Record Sheet. These actions will be accomplished in accordance with standard Tag-Out procedures.
- (b) The normal Authorizing Officer will authorize hanging tags for the initial isolation using standard tag-out procedures. When clearing and hanging tags to support subsequent iterations, the designated on-site Authorizing Officer will sign the DANGER/CAUTION Tag-Out Record Sheet and tags at the work site. Tags will be hung and cleared using standard procedures.
- (c) When the last iteration is complete, the normal Authorizing Officer will clear the DANGER/CAUTION Tag-Out Record Sheet from the Tag-Out Index.
- f. STANDARD TAG-OUT PROCEDURES. Standard tag-out procedures are to be used for all corrective maintenance in all ships/craft, including nuclear vessels, and for Planned Main-

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tenance System (PMS) requirements except as prescribed in paragraph 630.17h of this bill.

NOTE: PMS tag-out procedures prescribed in paragraph 630.17h of this bill shall not be used in submarines, submarine tenders, submarine rescue vessels, in propulsion areas of nuclear surface ships, or for Nuclear Support Facilities equipment or systems in destroyer tenders.

The term "out-of-commission" as used in this bill can apply to either a system or a component of a system. Requirements for tagging-out systems/components vary depending on circumstances and local directives. Equipment requiring the approval of the Commanding Officer (CO) for tag-out may depend on ship class and may be delineated in the Engineer's standing orders. In all cases, however, tag-out requirements shall follow Type Commander guidance and directives.

When a requirement for tag-out has been identified, and the affected system will be rendered out-of-commission as a result of the tag-out action, the Authorizing Officer shall obtain permission of the CO when appropriate and the cognizant Department Head prior to effecting the tag-out. In addition, the Authorizing Officer shall notify the cognizant Division Officer of the requirement for the tag-out. On ships having Damage Control Central, the Authorizing Officer shall notify Damage Control Central if a damage control-related system or component will be rendered out-of-commission as a result of the tag-out. If Damage Control Central is not manned on a full time basis, the Authorizing Officer shall notify the watch station maintaining the damage control closure log. The Authorizing Officer should obtain concurrence from the OOD or EOOW, as appropriate, if the tag-out will affect systems under that officer's cognizance. When appropriate permission and concurrence have been obtained,

the Authorizing Officer shall direct the preparation of the Tagout Record Sheet and tags. The above procedures may be modified during overhaul periods at the discretion of the CO.

- (1) PREPARATION OF TAGS AND RECORD SHEETS. DANGER and CAUTION tags and the associated Tag-out Record Sheet shall be prepared as follows:
- (a) The person designated to prepare the tag-out, normally the ship's force petty officer in charge of the work, shall fill out and sign the Record Sheet and prepare the tags. Ditto marks or similar devices such as arrows shall not be used on the tag-out record sheet.
- (b) A Record Sheet is prepared for a stated purpose, and all tags for that stated purpose are listed on a single Tagout record (continued on additional sheets as necessary). This purpose may include several work items as described in paragraph 630.17.e(14). Each Tag-out Record is assigned a log serial number in sequence. The Index/Audit Record shall be used for assigning log serial numbers. The log serial number is also used to identify each tag associated with the given purpose. Each tag is given its own sequential number as it is entered in the record sheet (for example, Tag 70-16 would be the sixteenth tag issued on a single tag-out record with the log serial number seventy). In order to differentiate among tag-out logs, a prefix system approved by the Commanding Officer shall be used with the log serial numbers. For example, on nuclear submarines, in order to differentiate between ship's tags and propulsion plant tags, ship's shall be prefixed "S" and propulsion plant tags "P".
- (c) The Tag-out Record Sheet shall include reference to any documents that apply (for example, work permit, work procedure, MRC MIP number, EOSS number, repair directives, reentry control form, test form, or ripout form). The reason for the tag-out, the hazards involved, amplifying instructions, and the work necessary to clear the tags should be extracted from reference documents or from the personnel requesting the work and shall be sufficiently detailed to give watchstanders reviewing the Tag-out Log a clear understanding of the purpose of and necessity for each tag-out action. When the tag-out is initiated, all known work items should be included in the "Operations/Work items included in tag-out" section of the Tag-out Record Sheet. For each work item, fill in applicable documentation number and title, tag numbers used, and date/time.
- (d) Enough tags should be used to completely isolate the system, piping, or circuit being worked on or to prevent operation of a system or component from all stations that could

exercise control. System diagrams or circuit schematics shall be used to determine the adequacy of all tag-out actions. The location (for example, MS-1, STBD TG BKR) and position/condition (for example, OPEN, SHUT, BLANK FLANGE INSTALLED) of the tagged item should be indicated by the most easily identifiable means. The position/condition column on the Tag-out Record Sheet need not be filled in for CAUTION-tagged items.

- (e) When tags and the Tag-out Record Sheet are filled out, a second person shall make an independent check of tag coverage and usage, using appropriate circuit schematics and system diagrams as necessary, and shall indicate, by signing the Record Sheet, satisfaction with the completeness of the tag-out action.
- (f) The Authorizing Officer shall review the Record Sheet and tags for adequacy and accuracy and when satisfied, sign the Record Sheet and tags as Authorizing Officer.
- 1. If the tag-out was requested by a repair activity, a repair activity representative shall sign the Tag-out Record Sheet indicating repair activity satisfaction with the adequacy and accuracy of the tag-out. When verified, the tags serve to alert personnel removing tags that repair activity concurrence is required.
- 2. If repair activity representative concurrence is not required, this space on the Record Sheet need not be filled in.
- 3. On ships with a Damage Control Central, the Authorizing Officer will annotate the Tag-out Record Sheet in the upper right hand corner "DCC notified", followed by his/her initials. This ensures that Damage Control Central is fully cognizant of the extent of the tag-out and the status of the material condition of the unit. If Damage Control Central is not manned on a full time basis the record sheet will indicate "(watchstation maintaining damage control closure log) notified."
- $\underline{4}$. The Authorizing Officer then authorizes installation of the tags.
- (g) The person attaching the tag shall ensure that the item tagged is in the prescribed position/condition. Permission to change an item to the prescribed condition/position must be obtained from the Authorizing Officer. This permission may be given at the time the tag out is signed or the authorizing officer may require his permission just prior to repositioning the valve or switch to sequence the operation of several components. As each tag is attached and the position/condition

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verified, the person attaching the tag shall sign the tag and initial the Record Sheet. If the item to be tagged has previously been DANGER-tagged, verification of the item's position/condition by the person attaching the new tag shall consist of a check that the position/condition specified on the new and the installed DANGER tags is the same.

NOTE: Only qualified ship's force personnel shall position equipment and affix tags and labels. Tags are to be attached such that they are apparent to anyone who may attempt to operate the component. DO NOT attach tags to breaker covers or valve caps which may be subsequently removed.

(h) After completion of tag attachment, a second person shall independently verify proper positioning and tag attachment, sign the tag, and initial the Record Sheet. repair activity concurrence has been required for the tag-out, a repair activity representative should witness the verification, sign the tags, and initial the Tag-out Record Sheet. If so requested by a member of the diving team, a ship's force representative will escort the diving team member while personally sighting all applicable tags prior to signing the Diving Safety checklist to authorize diving operations on the ship. If the item to be checked has previously been DANGER-tagged, verification of the item's position/condition by any checkers shall consist of a check that the position/condition specified on the new and the installed DANGER tags is the same. Upon completion of tag attachment and verification, the Tag-out Record Sheet shall be placed in the active section of the Tag-out Log. All diver's tag-outs shall be on a separate tag-out sheet.

NOTE: Only qualified ship's force personnel shall perform the second check of tag installation. The second person shall not accompany the person initially installing the tag(s).

- (i) When the requirement for additional tags due to added work on an existing tag-out record sheet has been identified, the DANGER and CAUTION tags and Tag-out Record Sheet shall be handled as follows:
- 1. The person preparing the change to the existing Tag-out Record Sheet shall ensure that the purpose of the existing Tag-out Record Sheet remains unchanged by the addition of new work and associated tags.
- 2. The Tag-out Record Sheet shall be filled out to reflect the added work and the additional tags required shall be prepared. The reason for the tag-out, the hazards involved, amplifying instructions and work necessary to clear tags on the existing Tag-out Record Sheet shall be reviewed and updated, if

necessary, to ensure they reflect the new work being added to the record sheet. The petty officer in charge of the work signs the first coverage check block next to the added work item after a complete review to ensure that the proposed new tags, in addition to the existing tags, provide adequate coverage for all previously authorized work and new work on the Tag-out Record Sheet.

- 3. Each tag added to the existing tag-out shall be numbered sequentially in the tag series for the original tag-out. For each item, all applicable tag numbers should be listed in the "Tag Numbers Used" block.
- 4. When the new tags and Tag-out Record Sheet are filled out and signed by the petty officer in charge of the work, a second person makes an independent check of the tag coverage and usage using appropriate schematics and diagrams. The second person indicates, by signing the Record Sheet in the block for the new work item, his/her satisfaction with the completeness of the tag-out actions, including both the additional and previously issued tags.
- 5. The Authorizing Officer (and repair activity representative, when required) reviews the entire Record Sheet and new tags for completeness and accuracy and signs as the Authorizing Officer (and repair activity representative) block for the added work time. The Authorizing Officer then issues the tags.
- $\underline{6}$. Tags are attached as specified in paragraphs 630.17.f(1)(g) and f(1)(h). Upon completion of tag attachment and verification, the Tag-out Record Sheet shall be returned to the active section of the Tag-out Log.
- (j) Work shall not be permitted to start until DANGER tags required for the protection of personnel or equipment have been attached following this procedure.
- (2) REMOVAL/REPLACEMENT OF DANGER AND CAUTION TAGS. Danger and Caution tags should be removed immediately when the situation requiring the tag-out has been corrected.
- (a) Normally, before tags are cleared and removed, the completed work item listed in the "Operation/Work Items Included in the Tag-out" section of the record sheet shall be signed off by the work center representative (and the repair activity representative when required) in the designated signature block.

The authorizing officer will annotate the desired position or condition of the tagged item in the position/ condition block when authorizing tag removal. When the authorizing officer approves clearance of tags, he also grants, by his signature, permission to place the switch, valve, etc. in this position. If the authorizing officer requires his permission just prior to repositioning the valve or switch in order to sequence the operation of several components, he shall so inform the person removing the tag. Tags shall be removed prior to changing the position of the valve, switch, etc.

CAUTION: If a tag is to be removed from a component that has more than one tag attached, the prescribed position or condition must be identical to the tagged position/condition. Repositioning of a component with multiple tags is never authorized until all tags have been cleared.

- (b) In cases where tags must be removed prior to completion of the work, clearance of those tags may be authorized following the authorizing officer's verification of the adequacy of the isolation by the remaining tags for the completion of the work item.
- 1. When authorizing clearance of the tag(s), the authorizing officer shall update the Tag Number Used block to reflect those tags actually required for the remaining work. If this information cannot clearly be represented in the block, a new work item shall be added following the procedures in paragraph 630.17e(14)(a) to cover the remaining work, and the existing work item shall be signed as completed.
- 2. When the revised scope of work requires complex isolation, it may be appropriate for the authorizing officer to initiate a new work item for the remaining work, instead of modifying the isolation for the existing work item. The isolation for the remaining work should be verified and the work authorized as per paragraphs 630.17f(1)(a) through (f). The existing work item shall be signed as completed once the new work item is authorized.
- (c) When clearing individual tags from an existing Tag-out Record Sheet, the Authorizing Officer must ensure that the remaining tags provide adequate protection for work, testing, or operations remaining to be performed. Since one tag may have been used to provide protection for more than one work item on a tag-out record sheet, boundaries for each work item must be carefully reviewed and tag numbers updated as necessary when clearing individual tags.

- (d) DANGER tags shall be properly cleared and removed before a system or portion of a system is operationally tested and restored to service. Tags shall be removed only on signed authorization of the Authorizing Officer. When a repair activity has been a party to the initiation of a tag-out action, an authorized repair activity representative shall concur (by his/her signature on the Tag-out Record Sheet) in tag removal and clearance before removal.
- (e) As the tags are removed and the previously tagged item placed or verified in the position or condition prescribed in the clearance position/condition block, the date/time of removal shall be entered on the Record Sheet; each entry shall be initialed. Ditto marks shall not be used.

CAUTION: If the person directed to remove a tag finds that the clearance position/condition specified on tag removal would require repositioning an item which has more than one tag attached, all efforts to remove the tag shall be stopped and the discrepancy reported immediately to the officer who authorized the tag removal.

- (f) All removed tags should be returned immediately to the Authorizing Officer.
- (g) Removed tags should be destroyed after they have been delivered to the Authorizing Officer.
- (h) The Authorizing Officer will require a system lineup or lineup check when this action is deemed necessary.
- (i) When all actions for a tag-out record sheet have been completed, all tags cleared and destroyed, the system or component returned to normal operating (shutdown) or other specified condition, and any system lineups or lineup checks completed (when required), the Authorizing Officer will so certify by entering the date/time and by signing in the block at the bottom of the reverse side of the tag-out record sheet. Additionally, the "date cleared" shall be entered on the appropriate line of the Tag-out Index/Audit Record.
- 1. Completed Record Sheets should be removed from the active section of the log and placed in the complete section for review and removal by the officer designated in paragraph 630.17.g(1)(c).
- 2. On ships having a Damage Control Central, the Authorizing Officer will notify DCC that the tag-out has been cleared. The completed Tag-out Record Sheet will be annotated by

the Authorizing Officer on the reverse side (lower right-hand corner) "DCC notified"; followed by his/her initials.

- (j) When any component is tagged more than once, any DANGER tag takes precedence over all other tags. All DANGER tags must be removed and cleared following this procedure before the equipment is tested or operated.
- (k) A missing or damaged tag shall be reissued by indicating on the Tag-out Record Sheet on the line corresponding to the tag that the tag was missing or damaged and that a replacement tag was issued. Then a new tag shall be issued, using the next number in the Tag-out Record Sheet following the preceding procedures. The Authorizing Officer shall sign the Tag-out Record Sheet to authorize clearing damaged or missing tags and to authorize the replacement tag. As appropriate, concurring repair activity signatures must be obtained.
- (3) PREPARATION OF LABELS AND INSTRUMENT LOG. Labels shall be issued and removed in a manner similar to that required for tags and the log maintained following directions on the Instrument Log Sheet (Figure 6-16).
- (a) The Authorizing Officer authorizes the use of labels by signing the label and the Instrument log. When required for reactor plant systems and reactor plant support systems, concurrence of the repair activity representative will be indicated by the representative's signature on the label and in the Instrument Log next to that of the Authorizing Officer.
- (b) Second check signature are not required on the label or in the Instrument Log.
- (c) The labels shown in Figures 6-12 and 6-13 shall be used for installed instruments and indicating systems. When the ship is under construction or assigned an availability to a repair activity not under the control of the type commander, the provisions of paragraph 630.17.e(1) apply; however, only one label shall be used for one purpose (that is, do not use both ship's force and repair activity labels).
- (d) When the labels shown in figures 6-12 and 6-13 are assigned, they shall be affixed to the exterior surface of the affected instrument in such a fashion that operators can easily determine the status of instrument operability.
- (e) For installed instruments not associated with propulsion plants on nuclear powered ships and for portable test and radio equipment, the labels shown in figures 6-12 and 6-13

may be replaced by those affixed by a qualified instrument repair or calibration facility.

(f) Labels should be immediately removed when appropriate corrective action has been completed (that is, affected instrument has been satisfactorily repaired, corrected, replaced, and/or aligned or calibrated).

G. ENFORCEMENT

- (1) The following procedures apply to Tag-out Log audits:
- (a) The Tag-out Logs will be kept in the spaces designated. Supervisory watchstanders will review the log during watch relief.
- (b) A check of outstanding tags/labels and an audit of the Tag-out Log will be conducted as herein described. The Authorizing Officer is responsible for ensuring that the checks and audits are performed at the required frequency and that the results are reported to the cognizant officer.
- 1. All outstanding tags listed on each Tag-out Record Sheet will be checked as correctly installed by visual comparison of the information on the tag, the Record Sheet and the item on which the tag is posted. When a valve or switch position is prescribed, a visual check that the item is in its proper position will be made unless an operation such as removal of a cover, cap or closure is required. No operation of a valve or switch is authorized as part of a routine tag-out audit. addition, a spot check of installed tags should be conducted to ensure that tags so checked are effective (that is, covered by an active Tag-out Record Sheet). Report all discrepancies in the check of actual position at once to the cognizant watch/duty officer before proceeding further with the tag audit. The date, time, discrepancies (including corrective action), and signature of the person conducting the check will be logged on each Tag-Out Record Sheet under the last tag listed.
- 2. When the actual position of a DANGER-tagged valve is in doubt, the OOD or EOOW, with the specific permission of the responsible department head if available, may authorize two persons to independently check the position of the specific valve(s). (Checking the position of a valve is done only by attempting to turn the valve handwheel/operator a small amount in the SHUT direction). This is an approved exception to the prohibition on operation of DANGER-tagged equipment. This valve position check shall be performed using the applicable approved procedures for valve lineup checks and, in the propulsion areas of nuclear powered ships, shall be documented on a valve lineup

checksheet in accordance with the Engineering Department Manual for Naval Nuclear Propulsion Plants, OPNAVINST C9210.2 (NOTAL).

- 3. All outstanding Tag-out Record Sheets will be audited against the Index/Audit Record section. As part of the audit, each Tag-out Record Sheet will be checked as specified above. The date, discrepancies noted, and signature of the person conducting the audit will be logged by a line entry in the Index/Audit Record section of the Tag-out Log.
- 4. Checking the installation of instrument labels and auditing of logs shall be similarly conducted, with a line entry in the Instrument Log, containing date, time, discrepancies noted, and signature.
- 5. Checks and audits of all tag-outs will be performed every two weeks. Nuclear-powered ships in overhaul/new construction/conversion/restricted availability will conduct checks and audits of the propulsion plant Tag-out Log weekly.
- 6. Results of audits will be reported to the cognizant department head.
- (c) In order to ensure that tag-out/label procedures are being enforced properly, the cognizant department head should frequently check the Tag-out Log, note errors, and bring them to the attention of those responsible. The completed Tag-out Record Sheets and Instrument Logs should be removed by the department head after reviewing them.
- (2) Violation of any tag compromises the entire tag-out system and could in itself have serious consequences. Therefore, strict adherence to the Tag-Out procedure without exception is required by all personnel.
- (3) Loose tags which have been removed shall be destroyed.
 - h. PLANNED MAINTENANCE SYSTEM (PMS) TAG-OUT PROCEDURES
- (1) PURPOSE. The purpose of this portion of the Equipment Tag-out Bill is to provide separate procedures for use when accomplishing certain designated PMS maintenance actions in non-nuclear surface ships/craft and non-nuclear, non-propulsion areas of nuclear surface ships.

NOTE: PMS tag-out procedures shall not be used in submarines, submarine tenders, submarine rescue vessels, in propulsion areas of nuclear surface ships, or for Nuclear Support Facilities equipment or systems in Destroyer Tenders.

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(2) INFORMATION

- (a) Procedures prescribed herein apply only to those PMS maintenance actions specifically authorized by the Department Head and approved by the Commanding Officer as indicated on the Tag Guide List (TGL). Specifically excluded from those procedures are PMS actions which require participation of two or more work centers and those requiring more than one working day for completion. In these cases the tag-out procedures described in section 630.17.6 will be used.
- (b) Type commanders will provide guidance concerning applicability of these procedures to various categories of PMS maintenance actions, subject to restrictions addressed above.
- (3) DEFINITIONS. As used in the PMS Tag-Out procedures, the following definitions apply:
- (a) DANGER TAG. (See Figure 6-11). A RED tag prohibiting operation of equipment that could jeopardize safety of personnel or endanger equipment, systems, or components. Under no circumstances will equipment be operated or removed when tagged with DANGER tags. Laminated DANGER tags, intended for repeated use, are authorized only for designated PMS maintenance actions addressed in this procedure. These laminated tags shall be serialized by work center.
- (b) TAG GUIDE LIST (OPNAV 4790/107). (See Figure 6-17). A card similar in size to a PMS Maintenance Requirement Card (MRC), which contains the information necessary to properly and effectively place tags to prevent improper operation when a component, equipment, system, or portion of a system is isolated for the accomplishment of Planned Maintenance System (PMS) maintenance requirements. A Tag Guide List (TGL) contains the number of tags required for the tag-out, the location of each tag, the position of the tagged item (open, shut, off, on, etc.) and the permission and notification requirements for the maintenance and tag-out action. TGLs will be laminated after final approval and will be attached to applicable MRCs in the same manner as Equipment Guide Lists (EGLs).
- (c) WORK CENTER PMS RED TAG RECORD. This record, maintained in the work center, will be a notebook in which the issue of laminated red tags used for designated PMS maintenance actions will be recorded. At the top of the first page, the number of laminated DANGER tags issued to the work center will be noted for inventory purposes. Additionally, the record will have provisions for recording: (1) The tag serial number(s) issued, (2) date of issue, (3) the MRC for which the tag was issued,

TAG GUIDE LI	ST			NUMBER OF TAGS PER EQUIP			
OPNAV 4790/107	(10-80) S/N 0107-LF	-047-9545					
MIP & M	RC NO		_		NOTIFICATION DATA		
5011	inerchit			COLD IRON	INPORT STEAMING	UNDERWAY	
EQUI	IPMENT		_				
EQUIPMENT SERIAL NO.	SERIAL NO. SWITCH/VALVE	LOCATION OF SWITCH/VALVE	POSITION OF TAGGED ITEM		AMPLIFICATION DATA		
		*					
						·	
						<u> </u>	
		VE	RIFICATION/APPRO	OVAL SIGNATURES			
wcs		DIV OFF		DEPT HEAD	со		
					-		

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(4) name of person to whom tag was issued, and (5) date and time returned. A copy of PMS Tag-Out Procedures and any amplifying instructions shall be a part of the Work Center PMS Red Tag Record.

i. TAG GUIDE LIST PREPARATION

(1) Initial preparation of the TGL is a vital element of the PMS Tag-out procedure. Accordingly, extreme care must be exercised in TGL preparation to ensure that sufficient tags are included to completely isolate the section of piping or circuit being worked on or to prevent operation of the system or component from all stations which could exercise control. System diagrams or circuit schematics shall be used to determine the adequacy of tag-out actions in preparing the TGL. Equal care must be given to ensuring that permission and notification actions indicated on the TGL are consistent with safety and with sound management practices.

NOTE: Engineering Officer of the Watch/Engineering Duty Officer permission shall be required for tag-out of main propulsion equipment. OOD permission shall be required for systems under the OOD cognizance.

- (2) Tag Guide Lists are to be prepared by the Work Center Supervisor (WCS), reviewed independently by the division officer and department head, and approved by the Commanding Officer prior to use.
- j. PROCEDURES. The procedures set forth in this paragraph apply only to designated Planned Maintenance System (PMS) maintenance action. When a requirement for tags for PMS maintenance has been identified and a Tag Guide List (TGL) has been prepared and approved by the Commanding Officer, the following procedures will be followed:
- (1) When a PMS maintenance action is to be performed, the Work Center Supervisor will obtain permission from the person or watch specified on the TGL.
- (2) Upon receiving permission, the Work Center Supervisor (WCS) will sign in grease pencil and issue the appropriate number of tags as the authorizing officer to the maintenance person and record the issue in ink in the Work Center PMS red tag audit record sheet.
- (3) Using grease pencil, the maintenance person will fill in the appropriate data on the tag (SYSTEM/COMPONENT/IDENTIFICATION, DATE, TIME, POSITION, OR CONDITION OF ITEM

TAGGED), position the tagged items as specified on the TGL, affix the tags, and sign the tags.

- (4) A witness designated by the WCS will independently check the tag-out action for compliance with the TGL and, if satisfied, sign the tags. The WCS is responsible for ensuring that persons assigned to make or witness the tag-out are qualified to perform the duties under this bill.
- (5) The maintenance person will then perform the maintenance action. If the MRC is applicable to several items listed on an Equipment Guide List (EGL), and those actions are consecutively scheduled, the tag-out process (steps a through d) will be repeated for each separate maintenance action.
- (6) If the maintenance action requires an operational test of the equipment, either during the maintenance action or upon completion of it, the DANGER tags will be removed and retained by the person performing the PMS maintenance action and tag-out action. If the tags are to be reinstalled upon completion of the operational test, a qualified witness must recertify that the position of the isolation component(s) and the placement of the tags are under the Tag Guide List (TGL). The TGL will state if permission is required to conduct the test. Upon completion of an operational test, the maintenance person shall not be authorized to reinstall tags for the purpose of accomplishing other maintenance actions without obtaining new approval from cognizant authority unless specifically approved otherwise on the TGL.
- (7) Upon completion of the maintenance action, the maintenance person will restore the equipment to its normal or desired condition. Upon verification of the clearance condition by a second person, the maintenance person shall remove the tags, wipe them clean, and return them to the Work Center Supervisor (WCS).
- (8) The WCS shall record the return of the tags in the Work Center PMS Red Tag Record by lining out and initialing the tag issue entry, and shall report completion of the maintenance action to the person or watch from whom permission was originally obtained (as indicated on the TGL).
- k. ENFORCEMENT. The following procedures apply to PMS Red Tag Record audits:
- (1) A daily inventory by serial number of all Work Center PMS tags should be conducted by the cognizant Work Center Supervisor and deficiencies reported to the cognizant department head or duty officer.

- (2) A weekly audit will be conducted by the cognizant division officer and deficiencies reported to the department head. Indication of this audit will be shown by the division officer's initials at the right side of the record or on the next blank line of the record.
- (3) During TYCOM PMS inspections, these tag-out procedures will be implemented for MRCs selected for inspection which require accomplishment of a tag-out. PMS tag-out procedures will also be included in other routine PMS inspections.

630.18 DIVING BILL (DIVERS)

- a. PURPOSE. To establish procedures and precautions for U.S. Navy diving operations provided by organic ship's divers, provided by an outside diving activity, or conducted on ships adjacent in a nest or on a pier.
- b. RESPONSIBILITY FOR THE BILL. The diving officer is responsible for this bill, and in addition, shall develop, incorporate into this bill, and employ a Diving Safety Check-off List, tailored to the individual unit. (A sample checklist and associated documentation are provided at the end of this bill.)

c. INFORMATION

- (1) This regulation is intended for SCUBA diving, but these guidelines also apply to dives made with lightweight diving equipment.
- (2) All diving operations will be conducted following the U.S. Navy Diving Manual, NAVSHIPS 0994-LP-001-9010 (NOTAL).
- (3) The Commanding Officer may designate as ships divers, personnel from any department who are graduates of U.S. Navy diving courses, have had a current diving physical examination within five years per article 15-66 of the Manual of the Medical Department (NAVMED P-117), and are currently qualified as Navy divers.
- (4) Explosive Ordnance Disposal (EOD) Teams, when embarked, are capable of performing most routine ships diving services. Shipboard EOD Teams, composed of one officer and five enlisted technicians, have diving equipment organic to team equipment allowances. The EOD officer may be designated ships diving officer during periods of team embarkation.
- (5) Diving services may be required under the following circumstances.
- (a) Underwater inspection of hull, screws, rudder, and/or sonar domes.
 - (b) Aircraft lost in shallow water.
 - (c) Personnel casualties in shallow water.
 - (d) Flooded compartments.
- (e) Ordnance lost in shallow water (EOD personnel only).

- (f) As required by the Commanding Officer.
- (6) Increased vigilance must be maintained, when at anchor or in port, for diving operations that may be conducted by foreign national ships, contractors, and foreign contractors. Foreign and commercial dive procedures vary and may not correspond with U.S. Navy dive and dive notification procedures.

d. RESPONSIBILITIES

- (1) The Commanding Officer, or in his/her absence the Command Duty Officer, shall ensure, by use of own ship's Diving Bill and the Diving Safety Check-off List designating appropriate equipment to be secured and tagged-out, and the Diving Safety Check-off List employed by the Diving Officer/Diving Supervisor, that diving operations may be safely conducted on or near his/her ship.
- (2) The Diving Officer shall be responsible for the safe conduct of diving operations under the U.S. Navy Diving Manual (NOTAL).
- (3) The Engineer Officer shall furnish the Diving Officer or Supervisor information on the physical condition and status of any ship's equipment that might affect divers. He/she shall not operate or energize any equipment that may affect diving operations without first notifying the diving supervisor.
- (4) The Reactor Officer (nuclear powered ships) shall provide the Diving Officer information on the status of the reactor plant system and required radiological controls.
- (5) The OOD shall keep informed of the status of the diving operation, and be alert to changes in sea or weather conditions which might affect the diving operation. In addition, the OOD shall be aware of diving operations conducted on adjacent ships and ensure that the Diving Officer/Diving Supervisor of the unit conducting the dive is aware of the ship's engineering and SONAR status.
- (6) The Medical Officer shall ensure that annual physical examinations of divers are conducted under Chapter 15, Manual of the Medical Department.

e. GENERAL DIVING PROCEDURES AND PRECAUTIONS

(1) When divers are working over the side, the location and status of all ship's machinery within the diving area must be determined prior to operations. The status of this equipment

must not be altered without prior notification of the Engineering Duty Officer and concurrence of the Diving Supervisor.

- (2) The Diving Officer shall notify the Reactor Officer and the Radiation Control Officer before diving operations commence near a nuclear-powered ship.
- (3) Divers working near a nuclear-powered ship shall wear dosimetry as required by the Radiological Manual for Nuclear Powered Ships (NAVSHIPS 389-0153).
- (4) Prior to a diving operation, the Diving Officer will ascertain the location of the nearest medical facilities and recompression chamber.
- (5) Divers shall not enter the water until permission is granted by the OOD and the international signal "CODE ALPHA" is flying from the ship and the diving boat.

NOTE: Systems marked with an asterisk in item (6) will be tagged out under the Equipment Tag-out Bill, paragraph 630.17, and will be verified by both the Safety Officer and the Diving Officer.

- (6) Without specific prior knowledge and concurrence in each instance by the Diving Officer:
 - (a) Main ballast tanks will not be flooded or blown.
 - (b) Sanitary tanks will not be blown.
 - (c) The stern planes will not be moved.*
 - (d) The rudder will not be moved.*
- (e) The screw will not be turned. With concurrence of the Diving Officer, screws may be turned at minimum jacking speed. In this case, the OOD, via the Engineering Duty Officer, shall ensure that screws are turning no faster than minimum jacking speed.
 - (f) The mooring lines will not be adjusted.
- (g) The secondary propulsion motors will not be rigged out or trained, nor will the screw be turned.*
 - (h) The main seawater system will not be operated.
- (i) The anchor and anchor chain will not be manipulated in any way.*

- (j) The torpedo tubes will not be exercised.*
- (k) Radioactive effluents will not be discharged.
- (1) Sonar will not be energized.*
- (7) Diving equipment will be checked prior to the dive and periodically throughout the operation to ensure proper functioning.
- (8) All boats will stay outside a 50-yard radius of diving operations.
- (9) Except in extreme emergencies, no diving operation will commence unless four qualified divers are present.
- (10) Divers will always dive with one standby diver in a ready condition.
- (11) Under no circumstances shall a diver enter the water if unable to meet all the requirements of the dive.
- (12) Under low-visibility water conditions, divers will use a buddy line. If a surface tender is also necessary, standard line-pull signals shall be used.
- (13) Divers will be checked for sickness and injury immediately upon leaving the water.
- (14) If in a nest, all ships in the nest shall be informed.
- (15) When divers are working over the side, the word will be passed every 30 minutes, "Divers are working over the (port)/ (starboard) side between frames ______ and _____. Do not (add appropriate words based on own ship's Diving Bill, e.g. Do not operate any underwater sonar equipment)."
- (15) The active sonar shall not be operated if divers are in the water anywhere in the nest.
- (16) When divers are working near adjacent ships the provisions of this bill apply. The duty officer shall clear with the duty officer of the ship from which divers are working before undertaking any evolution prohibited by this bill.

	Delivery Date:					
	Pier:					
From:	Commanding Officer, Consolidated Divers Unit					
To:	Command Duty Officer, USS					
Subj:	PREPARATION FOR AND SAFETY PRECAUTIONS DURING DIVING OPERATIONS					
Ref:	(a) OPNAVINST 3120.32C, Standard Organization and Regulations of U.S. Navy					
	 (b) NAVSEA 0994-LP-001-9110, U.S. Navy Diving Manual Vol 1 (c) OPNAVINST 5100.19C, Navy Occupational Safety and Health Manual for Forces Afloat 					
Encl:	(1) Diving Safety Checklist(2) Passing the Word(3) Receipt of Diving Operations Check-off Sheet					
	ing operations are scheduled to commence on					
2. Na	ture of diving operations: JSN					
3. Diving operations will be conducted on your vessel commencing approximately on, you are requested to assign a responsible contact person, who is knowledgeable of the ship and work to be performed, to be available to the Diving Supervisor until diving operations are completed. Diving operations will be conducted following references (a) through (c) which require a diving safety checklist be completed prior to commencement of diving operations. The applicable portions of enclosure (1) are to be completed and returned to the Diving Supervisor upon arrival.						
IF THE CHECKLIST IS NOT COMPLETED WITHIN 30 MINUTES FOLLOWING THE DIVE TEAM'S ARRIVAL, DIVING SERVICES WILL BE CANCELED. THE DIVE CAN BE RESCHEDULED THROUGH YOUR MAINTENANCE COORDINATOR AT NAVSURFPAC/LANT READINESS SUPPORT GROUP.						
CDP SIG	GNATURE					

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4. All suctions and discharges within 50 feet of the work area must be $\underline{\text{red}}$ tagged out.

- 5. A ship's force representative will escort CDU on board diver representative while personally sighting all applicable tags prior to signing the Diving Safety Checklist to authorize diving operations on the ship (reference (a), paragraph 630.17.f(1)(h)).
- 6. The CDU on board diver representative shall initial the Tag-Out Record Sheet indicating repair activity satisfaction with the completeness of the tag-out. When verified, the tags serve to alert personnel removing tags that repair activity concurrence is required (reference (a) paragraph 630.17).
- 7. Sound powered phone communications are required from the weather deck to the below deck space where the work is to be accomplished.

THE SOUND POWERED PHONES SHALL BE MANNED BY SHIPS FORCE PERSONNEL KNOWLEDGEABLE OF THE WORK BEING CONDUCTED.

8. If you have any questions concerning this check-off sheet, contact Consolidated Divers Unit (CDU) at ______ or _____ or _____ after normal working hours). Request to talk to the Repair Officer, Scheduling Officer, or the Command Duty Officer after hours.

/s/

DIVING SAFETY CHECKLIST

- 1. THE COMMAND DUTY OFFICER shall:
- a. Ensure that all precautions listed in the following paragraphs have been properly accomplished and will be adhered to while diving operations are in progress. The Diving Supervisor will be informed immediately of any changing conditions or projected operations that may affect diving operations.
- b. Ensure that no drills are conducted on board that would impede the efficiency of diving operations or jeopardize diver safety.
 - c. Grant permission to commence diving operations.

)

	The following personnel must be informed of diving ons and their location. Signature is required verifying tion.
	(1) ASW OFFICER (Duty Sonar Tech)
	(2) ENGINEERING DUTY OFFICER
	(3) RADCON OFFICER (if applicable)
	(4) DECK OFFICER
COMMAND	DUTY OFFICER SIGNATURE
2. THE	CHIEF ENGINEER shall:
	Ensure all equipment/machinery indicated below are and red tagged.
	#1 Main Circulation Pump
	#2 Main Circulation Pump
	Jacking Gears
	Shafts Locked
	Control reversible PitchPump
	Fin Stabilizers
	Bow Thruster
	Sonar
	Fathometer
	Impressed Current
	Cathodic Protection
having s	List below the status of operation and standing equipment seawater suctions or discharges. Any equipment in a standby within divers working area must be placed in

manual standby.

	EQUIPMENT	LOCATION	SUCTION/DISCHARGE
-			
-			
the	c. Ensure that al divers' working ar		discharges within <u>50 feet</u> of ed out.
	d. Provide blank	flange, if requ	ired
		DANGER	
	-		VILL NOT BE CHANGED OR'S AUTHORIZATION
CHIE	F ENGINEER SIGNATO	re	
3.	WEAPONS/DECK shall	.:	
acco			cautions have been properly hile diving operations are
and	(1) All sonar danger tagged.	and underwater	electronic equipment secured
	(2) Mooring li	nes will not be	adjusted.
duri	(3) Anchors an		will not be manipulated
	(4) Chain stop	pers have been	passed.
WEAP	ONS OFFICER SIGNAT	URE	
DECK	OFFICER SIGNATURE	:	

4. THE OFFICER OF THE DECK shall:

- a. Ensure that small boats and craft are kept clear of the diving operations.
 - b. Display Code ALPHA at the OUTBOARD yardarm.
- c. During diving operations, pass the word listed in enclosure (2).

THE WORD SHOULD BE PASSED OVER THE SHIP'S GENERAL ANNOUNCING SYSTEM AT 15 MINUTE INTERVALS.

- d. Ensure that no shipboard evolutions will be conducted in the vicinity of the divers' working area or inside the safe distance surrounding the diving area (designated by the Diving Supervisor).
- e. Notify the Diving Supervisor immediately of any change in the ship's condition.
 - f. Pass these precautions on to the relieving OOD.

OFFICER	OF	THE	DECK	SIGNATURE:	
OFFICER	OF	IND	DECK	SIGNATURE:	<u> </u>

5. ON BOARD DIVER REPRESENTATIVE shall:

- a. Personally sight all applicable red tags.
- b. Review and initial the "authorize" blocks of the applicable Red Tag Sheet in the ship's Tag-out Log. Upon completion of dive operations, initial the clearance authorization blocks on the back of the Red Tag Sheets.
- c. Ensure ship's OOD retains enclosure (2) of this document to be used while passing the word for diving operations.
- d. Ensure ship is tagged and ready to dive within the 30 minute time frame or contact the Diving Supervisor if unable to accommodate.

ON	BOARD	DIVER	REPRESENTATIVE	SIGNATURE	

DIVING SUPERVISOR

A. I have reviewed the sonar transmission status board and I am aware of the ship's location, time, and date of projected sonar transmissions. I will request permission from the CDO before conducting any dive operations after 1600. If diving after 1600 I will contact SOPA or Pier SOPA and request all sonar transmissions be canceled until completion of diving operations.
DIVING SUPERVISOR SIGNATURE:/
Time/Date:///
B. Diving operations were completed for the day. SOPA and the Command Duty Officer have been notified. The Diving Supervisor should brief the Chief Engineer, Main Propulsion Assistant, or Engineering Duty Officer.
DIVING SUPERVISOR SIGNATURE
COMMAND DUTY OFFICER SIGNATURE:
Time/Date:/
PASSING THE WORD
Officer of the Deck shall:
a. Pass the following over all circuits every fifteen minutes:
"THERE ARE DIVERS WORKING OVER THE SIDE ON BOARD USS DO NOT OPERATE ANY UNDERWATER EQUIPMENT, ROTATE SCREWS, CYCLE RUDDERS, TAKE SUCTION FROM OR DISCHARGE TO THE SEA, RUN DRILLS OR THROW ANYTHING OVER THE SIDE, BEFORE CHECKING WITH THE DIVING SUPERVISOR."

MEMORAI	MDUM	
	Command Duty O	efficer USSsor
Subj:	RECEIPT OF DIV	ING OPERATION CHECK OFF SHEETS
underst	tand, and will	he Dive Safe Check-off sheets. I fully inform my chain of command, as to the nature to be conducted and when they will commence.
would :		t no drills are scheduled on board that ciency of diving operations or jeopardize
correct job is	tly in a <u>timely</u> scheduled, the	if the ship tag-out is not completed manner normally 30 minutes from when the Diving Supervisor will move on to other s, and the job will be rescheduled.
DATE/T	IME DELIVERED _	/
DELIVE	RED TO:	PRINT
		* WTM*
	_	SIGNATURE
DELIVE	RED BY:	

PRINT

SIGNATURE

ADDITIONAL NOTES:

630.19 SHIP'S SILENCING BILL

- a. PURPOSE. This bill provides a guide for reducing own ship's noise to enhance the performance of installed acoustic sonars and to decrease the acoustic detectability of own ship.
- b. RESPONSIBILITY FOR THE BILL. The Engineer Officer is responsible for this bill, and shall work with and through the Ship Silencing Board to accomplish the objectives of this bill.
- c. INFORMATION. Noise is simply defined as unwanted sound. Shipboard noise is usually an undesirable by-product of some useful activity, such as running propulsion machinery auxiliaries, or tools. It can also be generated by careless activity such as dropping tools or slamming hatches. While shipboard noise may impact the crew adversely physically and/or psychologically and indicate poor equipment maintenance, this bill is primarily concerned with "tactical" noise. The noise generated by one's own ship directly influences the performance of installed acoustic sonars and can aid the enemy in detection for an attack on the ship. There are four general areas or methods of reducing own ship's noise.
- (1) EQUIPMENT MAINTENANCE. Proper maintenance is vital to noise reduction. Installed devices for acoustically monitoring equipment must be used properly to produce increased reliability and reduced noise. Detailed procedures are in appropriate directives and manuals. If special equipment is not installed, the human ear and other tests can be used.
- (2) EQUIPMENT MODIFICATION. Effective noise reduction may involve major equipment alterations, replacement, or sound isolation of the equipment using special mountings. Material histories should contain information to support such activities.
- (3) PERSONNEL INDOCTRINATION. All hands must be indoctrinated continually in the proper steps for noise reduction and, in particular, in those personnel actions which can degrade or enhance noise reduction efforts.
- (4) OPERATIONAL MEASURES. There are several actions that can be taken to reduce shipboard noise, based on the tactical situation. They consist of: reduction or elimination of certain specified activity; restriction on the operation of certain equipment; speed limitations; and plant configuration.
- d. PROCEDURES. The following procedures require detailed supplemental instructions for each particular class or type of ship.

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- (1) THE EXECUTIVE OFFICER shall:
 - (a) Chair the Ship Silencing Board.
- (b) Ensure an effective all-hands training program on quiet ship procedures, including the indoctrination of new personnel.
- (c) Supervise overall implementation of the quiet ship program.
- (d) Ensure quiet ship conditions are defined and that implementing instructions are posted.
 - (2) THE ENGINEER OFFICER shall:
- (a) Supervise the preparation and maintenance of detailed instructions for quiet ship conditions.
 - (b) Maintain the ship's acoustic monitoring program.
- (3) THE ASW OFFICER (Operations Officer if no ASW officer is assigned) shall:
- (a) Advise the Commanding Officer on the appropriate quiet ship condition for current and projected operations.
- (b) Notify the Engineer Officer or other appropriate officer of any unusual acoustic noises in installed acoustic sensors which may be generated by shipboard equipment.
- (4) ALL DEPARTMENT HEADS shall ensure that their departments are secured (acoustically) for sea.
 - (5) THE OFFICER OF THE DECK shall:
- (a) Set the quiet ship condition as directed by the Commanding Officer.
- (b) Keep the EOOW informed of any anticipated changes in the quiet ship condition.
- (c) Keep rudder use, rate of rudder changes, and rapid speed changes to a minimum.

630.20 SHORE FIRE CONTROL PARTY BILL

- a. PURPOSE. To set forth the organization, command responsibilities, and personnel composition of the shore fire control party; provide lists of equipment to be used; and enumerate the conditions under which the shore fire control party may be called into service.
- b. RESPONSIBILITY FOR THE BILL. The Operations Officer, under the supervision of the Executive Officer, shall maintain this bill.

c. INFORMATION

- (1) The primary mission of the ship's shore fire control party is to provide shore fire control for guns supporting limited operations ashore and to coordinate that support with U.S. or allied forces ashore.
- (2) The secondary mission is to provide tactical control of aircraft supporting limited operations ashore and provide coordination similar to that for gunfire support.
- (3) The shore fire control party may be sent ashore under varying combat conditions. It must be prepared to defend itself from direct military assault and infiltration by irregular forces.

d. RESPONSIBILITIES AND PROCEDURES

- (1) THE EXECUTIVE OFFICER shall:
- (a) Exercise general supervision over the shore fire control party's preparations for debarking.
- (b) Ensure the shore fire control party's readiness by conducting drills and inspections.

(2) DIVISION OFFICERS shall:

- (a) Assign qualified personnel.
- (b) Post all assignments on the Watch, Quarter, and Station Bill.
- (c) Ensure personnel are equipped with the basic equipment.

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- (3) THE OPERATIONS OFFICER shall:
- (a) Provide pertinent gridded charts and intelligence to the Shore Fire Control Party Officer.
- (b) Ensure communication equipment is broken out, tested, and delivered to the Shore Fire Control Party.
- (c) Provide effective cipher, authentication, and communication plans to the Shore Fire Control Party Officer.
- (d) Assist the Shore Fire Control Party Officer with training.
- (4) THE WEAPONS OFFICER (or COMBAT SYSTEMS OFFICER) or other designated qualified officer shall:
- (a) Issue to the shore fire control party prescribed weapons, ammunition, and equipment.
- (b) Assist the Shore Fire Control Party Officer with training.
- (5) THE SUPPLY OFFICER shall issue the rations required by the Shore Fire Control Party Officer.
- (6) THE OFFICER OF THE DECK shall assist the Executive Officer in overall preparations and provide a boat for the party.
 - (7) THE SHORE FIRE CONTROL PARTY OFFICER shall:
- (a) Report to the Commanding Officer for orders and information.
- (b) Supervise readying the party for landing. Issue supplementary instructions as to weapon, ammunition, pack, ration, clothing, and equipment requirements to fit the situation
- (c) Report to the Executive Officer when party is ready.
 - (d) Train the shore fire control party.
 - (8) THE SHORE FIRE CONTROL PARTY shall:
- (a) Under supervision of the Shore Fire Control Party Petty Officer assemble for detailed instructions.

- (b) Assemble and prepare own packs, receive, and check equipment.
 - (c) Prepare for landing.
- e. PERSONNEL QUALIFICATIONS. In addition to individual qualifications, all shore fire control party personnel shall be familiar with the pertinent portions of the SECNAVINST 5060.22 (series) (NOTAL). Knowledge of parade display and ceremonial provision of the manual are required only as necessary for orderly conduct of training.

630.21 SPECIAL SEA AND ANCHOR DETAIL BILL

- a. PURPOSE. To establish policies for assigning personnel to stations and duties when the ship is in restricted waters and preparing to get underway or return to port.
- b. RESPONSIBILITY FOR THE BILL. The Weapons Officer (or Combat Systems Officer) or Deck Officer is responsible for this bill.
- c. INFORMATION. The special sea and anchor detail supplements the regular steaming watch. In some instances special sea and anchor detail personnel will relieve the regular watch.

d. RESPONSIBILITIES

(1) HEADS OF DEPARTMENTS shall:

- (a) Ensure division officers assign qualified personnel to ship and engine control stations as provided by this bill.
- (b) Initiate readiness for getting underway or for entering restricted waters reports to the OOD 30 minutes before the ship is to get underway or enter restricted waters. A report of "Ready to get underway" means the department is secured for sea and all navigational and ship control equipment of the department is functional.
- (c) A report of readiness to enter restricted waters means a department is ready to enter restricted waters. If doubt exists concerning a department's ability to get underway or to enter restricted waters, notify the OOD immediately.

(2) THE OFFICER OF THE DECK shall:

- (a) Call away the special sea and anchor detail as directed.
- (b) Supervise the procedures in this bill unless otherwise indicated herein.
- (3) DIVISION OFFICERS shall assign personnel to this bill.
- e. PROCEDURE FOR GETTING UNDERWAY. The OOD shall ensure that the events in type commander and ship check-off sheets for getting underway occur within the time sequence given. Table 6-5 is a sample check-off sheet.

1

TIME PRIOR TO	
GETTING UNDERWAY	
gerring unvertiff	EVENT
	START GYROS.
8 HOURS	ENERGIZE AND CALIBRATE ALL RADAR REPEATERS.
	VERIFY SCHEDULE OF LIGHTING OFF BOILERS.
6 HOURS 3 HOURS	VERIFY ARRANGEMENTS FOR DISCONTINUING SERVICES FROM THE PIER SUCH AS SHORE POWER, CRANE SERVICE.
3 HUURS	ASCERTAIN FROM THE EXECUTIVE OFFICER:
2 HOURS	1. IF ANY VARIATION IN STANDARD SEQUENCE OF SETTING SPECIAL SEA AND ANCHOR DETAILS EXISTS.
	2. TIME OF HEAVING SHORT OR "SINGLING UP" LINES. 3. DISPOSITION OF BOATS.
	4. INSTRUCTIONS CONCERNING U.S. AND GUARD MAIL
	5. NUMBER OF PASSENGERS AND EXPECTED TIME OF ARRIVAL.
	AFTER OBTAINING PERMISSION FROM THE EXECUTIVE OFFICER, START HOISTING BOATS AND VEHICLES AS SOON AS NO LONGER REQUIRED.
	AFTER OBTAINING PERMISSION FROM THE EXECUTIVE OFFICER, RIG IN BOOMS AND ACCOMMODATION LADDERS NOT IN USE AND SECURE THEM FOR SEA.
	HAVE THE WORD PASSED AS TO THE TIME THE SHIP WILL GET UNDERWAY.
	ENGERGIZE ALL RADARS EXCEPT THOSE PROHIBITED BY LOCAL ELECTROMAGNETIC EMISSION RESTRICTIONS.
	CONDUCT FORMAL GETTING UNDERWAY BRIEF. (MINIMUM 2 HOURS IF POSSIBLE)
1 1/2 HOURS	MUSTER THE CREW.
1 HOUR	SET CONDITION YOKE.
	TUNE AND PEAK RADARS.
	CONDUCT RADIO CHECKS ON ALL REQUIRED CIRCUITS.
	ENSURE THAT PIT SWORD IS IN RAISED POSITION.
45 MINUTES	UNDERWAY OOD, JOOD, AND JOOW TAKE STATIONS ON THE BRIDGE. N, A, AND E DIVISIONS MAN AFTER STEERING AND PILOT HOUSE AND TEST STEERING ENGINE, CONTROLS, COMMUNICATIONS, AND EMERGENCY STEERING ALARM.
	CLEAR THE SHIP OF VISITORS.
30 MINUTES	SET SPECIAL SEA AND ANCHOR DETAIL. PREPARE BOTH ANCHORS FOR LETTING-GO. OOD SHIFT WATCH TO THE BRIDGE.
	TEST THE SOUND-POWERED PHONE CIRCUITS IN USE.
	RECEIVE DEPARTMENTAL REPORTS OF READINESS TO GET UNDERWAY.
	MAA MAKE REPORT OF INSPECTION FOR STOWAWAYS.
	RECORD DRAFT OF SHIP FORE AND AFT.
	RAISE DECK EDGE ANTENNAS IF REQUIRED.
15 MINUTES	OBTAIN THE COMMANDING OFFICER'S PERMISSION TO TEST THE MAIN ENGINES AND DIRECT ENGINEERING CONTROL ACCORDINGLY AFTER ENSURING THAT THE SCREWS ARE CLEAR.
	REPORT READY FOR GETTING UNDERWAY TO THE EXECUTIVE OFFICER.
	TEST WHISTLE.
	"HEAVE SHORT" OR "SINGLE UP" LINES WHEN SO ORDERED.
	STAND BY TO RECEIVE TUGS AND PILOTS. IF ALONGSIDE A PIER, ENSURE THAT ALL SHORE CONNECTIONS ARE BROKEN AND THAT THE
	BROWS ARE READY TO BE REMOVED.
	WHEN REQUIRED, SOUND "QUARTERS FOR LEAVING PORT."
10 MINUTES	ORDER "MANEUVERING BELLS" BY SETTING THE ENGINE REVOLUTION INDICATOR SYSTEM ON A CERTAIN REPETITIVE NUMBER COMBINATION BEYOND THE RANGE OF THE ENGINES SUCH AS 999 (IF APPLICABLE).
•	WARN ENGINEERING CONTROL TO STAND BY TO ANSWER ALL BELLS.
	IF A FLAG OFFICER IS EMBARKED, REQUEST PERMISSION TO GET UNDERWAY AS SCHEDULED.
ZERO TIME	UNDERWAY.

- f. PROCEDURE FOR ENTERING PORT OR RESTRICTED WATERS. When preparing to enter restricted waters and/or to anchor or moor, the OOD shall ensure that the events occur within the time schedule of Table 6-6.
- g. ORGANIZATION. This bill will have detailed information concerning stations, personnel assignments, and duties of the special sea and anchor detail organization.
- h. COMMUNICATIONS. Where the primary maneuvering circuit (1JV) is overcrowded when special sea and anchor details are set, consider using the auxiliary maneuvering circuit (X1JV). Use portable two-way radios (walkie talkies) as back up. When entering or leaving port, activate and test the appropriate maritime UHF Bridge to Bridge circuit with another unit at the earliest opportunity.

TIME PRIOR TO ENTERING PORT OR RESTRICTED WATERS

	EVENT			
1 WHEN DIRECTED	DEBALLAST AS FAR IN ADVANCE AS POSSIBLE AND FOR AS LONG AS REGULATIONS PERMIT. PASS THE WORD "GO TO YOUR STATIONS, ALL THE SPECIAL SEA AND ANCHOR DETAIL." HAVE BOTH ANCHORS READY FOR LETTING-GO PRIOR TO ARRIVAL AT CHANNEL ENTRANCE. DETERMINE AND RECORD FORE AND AFT DRAFT OF THE SHIP. BLOW TUBES. DUMP ALL TRASH AND GARBAGE OVERBOARD.* PUMP BILGES WHEN CONDITIONS PERMIT.* SUBJECT TO THE CONCURRENCE OF THE NAVIGATOR RAISE THE PIT SWORD. ENSURE SMART APPEARANCE OF THE SHIP.			
1 HOUR	CONDUCT ENTERING PORT OR RESTRICTED WATERS BRIEF WHEN DIRECTED. ASCERTAIN EXPECTED TIME OF ANCHORING OR MOORING FROM THE NAVIGATOR, AND NOTIFY ENGINEER OFFICER, WEAPONS OFFICER, FIRST LIEUTENANT, AND ENGINEERING CONTROL PASS THE WORD, "MAKE ALL PREPARATIONS FOR ENTERING PORT. SHIP WILL ANCHOR (MOOR SIDE TO) AT ABOUT . ALL HANDS SHIFT INTO THE UNIFORM OF THE DAY." MAN DEPTH DETERMINING DEVICES. WEATHER PERMITTING, REMOVE SUCH CANVAS COVERS AS ARE NORMALLY OFF WHEN IN PORT. OBTAIN INFORMATION CONCERNING BOATING FROM EXECUTIVE OFFICER AND INFORM FIRST LIEUTENANT. LAY OUT MOORING LINES IF REQUIRED. SET UP AND CHECK ALL HARBOR AND TUG RADIO FREQUENCIES.			
30 MINUTES	SOUND "MAN ALL BOATS" AS SIGNAL OF EXECUTION FOR BOAT CREWS, WINCH CREWS, BOAT HANDLERS, BOOM AND GANGWAY RIGGING DETAILS TO TAKE STATIONS. OBTAIN INFORMATION FROM NAVIGATOR ON DEPTH OF WATER AT ANCHORAGE, ANCHOR AND SCOPE OF CHAIN TO BE USED AND INFORM FIRST LIEUTENANT. WHEN MOORING TO A PIER, INFORM FIRST LIEUTENANT AS TO RANGE OF TIDE AND TIME OF HIGH WATER.			
20 MINUTES	WHEN REQUIRED, DESIGNATED PERSONNEL FALL IN AT QUARTERS FOR ENTERING PORT. DIRECT CMAA TO INSPECT UPPER DECKS TO SEE THAT CREW IS IN PROPER UNIFORM.			
15 MINUTES	STATION IN-PORT DECK WATCHES. INSTRUCT GUARD MAIL PETTY OFFICER, MAIL CLERK, MOVIE OPERATOR, SHORE PATROL, AND ANY OTHER DETAILS LEAVING THE SHIP IN THE FIRST BOAT TO STAND BY ON THE QUARTERDECK. IF MOORING TO A BUOY, LOWER MOTOR WHALEBOAT WITH BUOY DETAIL AS DIRECTED. STAND BY TO RECEIVE TUGS AND PILOTS.			
UPON ANCHORING DR MOORING	SET THE IN-PORT WATCH. SECURE MAIN ENGINES, GYROS, AND NAVIGATIONAL RADARS AS DIRECTED. RECORD DRAFT OF SHIP FORE AND AFT.			

¹ IN ACCORDANCE WITH MARPOL REGULATIONS AND OPHAVINST 5090.1 (NOTALL

Table 6-6. Time Schedule for Entering Port or Restricted Waters

630.22 EMERGENCY TOWING BILL

- a. PURPOSE. To establish policies for assigning personnel to stations and duties to ensure a basic organization which will function when the ship is either towing or being towed.
- b. RESPONSIBILITY FOR THE BILL. The Weapons Officer/First Lieutenant is responsible for this bill.

c. INFORMATION

- (1) The special sea detail will be set for towing operations. Effective communications between the First Lieutenant on the forecastle or fantail and the OOD on the bridge are particularly important. When the ship is towing, the Conning Officer will be informed continually of the progress in getting the towing cable to the towed ship. Whenever towing or being towed, a towing watch will be maintained to observe towing conditions, keep the OOD informed, and cast off if so ordered. When the ship is being towed, the watch will be prepared to veer or heave in chain as ordered by the OOD. A cutting torch and unshackling kits will be on the forecastle when the ship is being towed (on the fantail when the ship is towing) to part the chain or hawser quickly in an emergency.
- (2) The circumstances under which a ship may take another in tow or be towed are so varied that no definite rules can be set. In view of this, officers and deck petty officers must be well indoctrinated in this important phase of seamanship. The U.S. Navy Towing Manual (NOTAL), are the pertinent references for Towing.

d. PROCEDURES AND RESPONSIBILITIES

- (1) THE EXECUTIVE OFFICER shall assist the Commanding Officer in the general supervision of a towing operation.
 - (2) THE FIRST LIEUTENANT is:
- (a) Responsible for the organization and training of the deck division for towing operations.
- (b) Responsible for the maintenance and availability of deck equipment to be employed.
- (c) In charge of the fantail if towing or the forecastle if being towed.

(3) THE ENGINEER OFFICER shall:

- (a) Make qualified personnel available to the First Lieutenant for specialized duties and for operating equipment under the cognizance of the Engineering Department.
- (b) Be responsible for the condition, maintenance, and availability of engineering department equipment.

e. TOWING PROCEDURE

- (1) The procedure for the approach and passing of the tow cable will vary with sea and weather conditions and the relative rate of drift of the two ships. The procedure must be understood by both ships prior to commencing the operations. The U.S. Navy Towing Manual (NOTAL), describes various situations and the procedure for passing the tow hawser for each. Crenshaw's "Ship Handling (NOTAL)," with a slightly different view, should be evaluated before commencing preparations.
- (2) When close enough, pass the messenger to the ship being towed. The forecastle will notify the fantail by telephone on which side the messenger is being passed so the appropriate 21-thread messenger may be bent on the three-inch messenger.
- (3) Have towed ship haul in messenger and tow wire and connect up. Pass a round turn around the paying bitt to control the wire as it pays to the tow. Have one person stationed at the hawser reel to maintain a slight amount of tension on the tow hawser to keep the tow hawser moving freely off the drum and to prevent the hawser from fouling by paying out in surges. When the preventer link seats in the ring shackle, disconnect the easing-out/inhaul pendant from the preventer link. This will prevent the easing-out/inhaul pendant from becoming a fouling hazard if it is necessary to slip the tow hawser in an emergency.
- (4) When the tow hawser is connected and both ships are in all respects ready to proceed, the engines will be started ahead as slowly as possible and stopped the instant the hawser begins to tauten out; turns will then be increased slowly until the inertia of the tow is overcome and both ships are moving slowly with steady tension on the hawser. Speed will be increased little by little up to that at which it is considered advisable to continue. At no time should an additional amount of strain be placed on the tow hawser to cause it to lift completely out of the water. The course may be changed gradually as necessary.

f. PROCEDURE WHEN BEING TOWED

- (1) Stop the anchor on the anchor chain which is to be paid out. Unbend it from the chain. Haul out the desired chain on deck by anchor windlass. Set up on the windlass brake (and compressor if desired) in order to keep the chain from backing into chain locker.
- (2) Shackle the chain stopper to the towing padeye on forecastle.
- (3) Secure a special shackle to the end of the anchor chain in order to connect to the thimble on the end of the tow hawser.
- (4) Haul the tow hawser on board, and secure it to the swivel on the end of the anchor chain. Have the special shackle ready to place on thimble of tow hawser.
- (5) Veer out the anchor chain in order to provide a heavy towing catenary. Approximately 60 fathoms should be paid out.
- (6) Veer or haul on chain as desired to keep ships in step (that is, taking wave crests together). When a comfortable distance is found, the strain may be shifted to the towing padeye by placing the stopper on the anchor chain and veering the chain.
- g. CASTING OFF THE TOW. Generally, if the towed ship is using a scope of anchor chain to the towing hawser, the towed ship will cast off hawser after heaving in the chain and disconnecting the hawser from the chain. Casting off will only be accomplished when both ships are ready and on signal from the ship receiving the hawser, the towing ship's engines will be stopped until such time as all hawser and messengers are no longer in danger of fouling the screws.

h. COMMUNICATIONS BETWEEN SHIPS DURING TOWING OPERATIONS

- (1) Normally, communications will be by radio or visual means. Use international signals from ATP 1, Volume II (for naval ships) or H.O. 102 (NOTAL) (for merchantmen).
- (2) Additionally, the following are the SOUND SIGNALS for night towing:
 - (a) I am putting my rudder right 1 short blast.
 - (b) I am putting my rudder left 2 short blasts.

)

(c) Go ahead - 2 long blasts.

- (d) Stop 1 long, 2 short blasts.
- (e) All fast 2 long, 1 short blast.
- (f) Haul away 2 short, 1 long blast.
- (g) Let go 2 long, 5 short blasts.
- (h) Pay out more line 1 short, 2 long blasts.
- (i) Avast hauling 3 short blasts.
- (j) I am letting go 3 groups of 5 short blasts each.

- 630.23 VISIT AND SEARCH, BOARDING AND SALVAGE, AND PRIZE CREW BILL
- a. PURPOSE. To set forth an organization to which personnel shall be assigned for visiting and searching, boarding and salvaging, and placing a prize crew on board ship on the high seas; and to prescribe appropriate responsibilities and procedures.
- b. RESPONSIBILITY FOR THE BILL. The Operations Officer is responsible for this bill and shall advise the Executive Officer of required changes or other matters affecting the bill.
- c. GENERAL. Under certain circumstances U.S. Navy ships are authorized to approach and visit ships encountered inside the territorial waters of the U.S. or in international waters. In addition, there are limited circumstances in which U.S. Navy ships may become involved in salvage operations or the taking of a prize. This bill describes generally the circumstances under which these situations may occur and prescribes responsibilities of officers and crew assigned to carry out such operations.

d. INFORMATION.

- (1) APPROACH AND VISIT. As a general rule, vessels in international waters are immune from the jurisdiction of any nation other than the flag nation. However, under international law, a warship may approach any vessel in international waters to verify its nationality. In addition, unless the vessel encountered is itself a warship or non-commercial government vessel of another nation, it may be stopped, boarded and the ship's documents examined, provided there is reasonable ground for suspecting that it is:
 - (a) Engaged in piracy;
 - (b) Engaged in the slave trade;
 - (c) Engaged in unauthorized broadcasting;
 - (d) Without nationality; or
- (e) Though flying a foreign flag, or refusing to show its flag, in reality, of the same nationality as the warship.
- (2) VISIT AND SEARCH. Under the law of armed conflict, belligerent warships or aircraft may visit and search a merchant vessel for the purpose of determining its true character, i.e., enemy or neutral, nature of cargo, manner of employment, and other facts bearing on its relation to the conflict. Such visits

occur outside neutral territorial seas. This right does not extend to visiting or searching warships or vessels engaged in government non-commercial service. In addition, neutral merchant vessels in convoy of neutral warships are exempt from visit and search, although the convoy commander may be required to certify the neutral character of merchant vessels' cargo.

- (3) SUPPORT FOR LAW ENFORCEMENT. U.S. naval units provide support to the United States Coast Guard (USCG) and other U.S. law enforcement agencies, primarily in the area of drug interdiction. When a naval unit is operating under USCG tactical control with a Law Enforcement Detachment (LEDET) embarked, the support may include providing a platform for approach, visit, and arrest/seizure of suspect vessels pursuant to the law enforcement authority of the USCG. Detailed guidance is found in the various Operation Orders (OPORDs) governing the affected naval units.
- (4) Additional information pertaining to the above is found in NWP-9, The Commander's Handbook on the Law of Naval Operations, chapters 3 and 7 (NOTAL).

e. RESPONSIBILITIES AND PROCEDURES

(1) THE EXECUTIVE OFFICER shall:

- (a) Designate, subject to the approval of the Commanding Officer, an Examining Officer to train and direct the visit and search party in accordance with the rules and procedures prescribed in NWP-9 and appropriate provisions of applicable OPORDs.
- (b) Designate, subject to the approval of the Commanding Officer, a Boarding Officer to train and direct the boarding and salvage party.
- (c) Designate, subject to the approval of the Commanding Officer, a Prize Master to organize, train, and direct the prize crew.
- (d) Coordinate all departments in organizing, training, and equipping personnel necessary for the various parties and crews required by this bill.
- (2) HEADS OF DEPARTMENTS shall require division officers to assign and equip qualified personnel for the parties and crews prescribed by this bill.

(3) DIVISION OFFICERS shall:

(a) Assign qualified personnel.

- (b) Post all assignments required by this bill on division watch, quarter, and station bills.
- (c) Ensure that designated division personnel participate in required training and equip themselves with the basic equipment.

f. APPROACH AND VISIT

- (1) DUTIES OF THE EXAMINING OFFICER. Personnel in the boat sent by U.S. naval vessels may carry arms. The Examining Officer shall inquire of the master and, if necessary, the crew regarding the nature of the vessel and its activity, relative to the circumstances which gave rise to the approach and visit; i.e., piracy, slave trade, etc. The Examining Officer shall recommend to his/her Commanding Officer one of the following actions:
- (a) That the ship be released (if ownership of the ship has been recently transferred).
- (b) That the ship be detained or seized and sent in for adjudication (if papers, questioning of personnel, search, and inspections do not result in satisfactory proof of ship's innocence).
- (2) PAPERS TO BE EXAMINED. The ship's papers to be examined are:
- (a) A certificate of registry or bill of sale (if the ship has been transferred recently from enemy to neutral ownership).
 - (b) The crew list.
 - (c) The passenger list.
- (d) The ship's log (to determine whether the ship has deviated from her direct course).
 - (e) The bill of health.
 - (f) The ship's clearance papers.
 - (g) The certificate of charter.
 - (h) The invoices or manifests of cargo.
 - (i) The bills of lading.

- (j) A consular declaration certifying the innocence of the cargo may be included but is not considered conclusive evidence of innocence.
- (3) REPORTS. The Examining Officer's report to the Commanding Officer of the visiting warship shall include the following information:
 - (a) Name and nationality of visited ship.
 - (b) Registry Number.
 - (c) Gross tonnage.
 - (d) Port and date of departure and destination.
 - (e) Number of passengers.
 - (f) General character of cargo.
 - (g) Any additional remarks and recommendations.
- (4) RECORD OF ACTION TAKEN. After the Commanding Officer of the visiting ship is advised of the findings, appropriate entries shall be written in the visited ship's log as follows:

If the visited ship is cleared by the visiting ship's Commanding Officer:

The				
as steamer or sailing	ship) was v:	isited by mo	e at	(give
hour and date). I hav	e examined (the papers of	concerning t	he ship
and her cargo, produce	d by the man	ster, which	show that h	ner voyage
is lawful. The circum	stances have	e been repor	rted to the	Command-
ing Officer of the vis	iting ship,	who has dir	rected that	the ship
be allowed to proceed				-

The ship is accordingly allowed to proceed on her voyage.

Entered _____ (give hour, date, and geographical position when entry is made).

(Signed name)
(Grade) ______, U.S. Navy Examining Officer

Note

The name of the visiting ship and the name or grade of its Commanding Officer shall not be disclosed.

If the visited ship is to be detained for search or other appropriate action:

		onality and class	
steamer or sailing			
and date). I have	examined the shi	p's papers conce:	rning the ship
and her cargo, prod	luced by the mast	er, which were	
(irregular; fraudul	ent; defaced; in	part destroyed;	in part
concealed; apparent	ly regular but o	wing to suspicion	ns having been
aroused by (state r	easons), a searc	h appeared to me	to be
warranted. The cir	cumstances have	been reported to	the
Commanding Officer	of the visiting	ship, who has di:	rected that
the ship be detained	d for the follow	ing reason	(state
reason, whether one	of those noted	immediately above	e or any other
reason justifying of	letention).		

The ship is accordingly detained.

Entered _____ (give hour, date and geographical position when entry is made).

(Signed name)
(Grade) _____, U.S. Navy Examining Officer

Note

The name of the visiting ship and the name or grade of its Commanding Officer shall not be disclosed.

(5) BOARDING AND SALVAGE

(a) General. Should the inspections by the Examining Officer or other circumstances reveal a need for further detention or seizure, the boarding and salvage party shall be directed by the Commanding Officer to board and take command of the ship, restrain the crew, and conduct salvage operation as necessary.

The composition of the boarding and salvage party shall be dictated by the size and mission of the visited ship. A portion of the boarding and salvage party shall consist of the rescue and assistance party.

The boarding and salvage party shall be alert for attempts at sabotage such as scuttling, fire, explosions, damage to power plant, and equipment, and contamination of fuel oil, water, and provisions.

- (b) Duties of the Boarding Officer. The Boarding Officer shall organize, train, and equip the boarding and salvage party and direct boarding and salvage operations on board ships to be taken as prizes or the salvage of any abandoned ship.
- (6) SPECIFIC DUTIES OF COMMANDING OFFICER OF CAPTURING VESSEL AND OF PRIZE MASTER
 - (a) Commanding Officer of Capturing Vessel
- <u>1</u>. Section 7657 of Title 10, United States Code, specifies duties of the Commanding Officer of the capturing vessel as follows:
- <u>a</u>. Secure the documents of the captured vessel, including the log, and the documents of cargo, together with all other documents and papers, including letters, found on board:
- \underline{b} . Inventory and seal all the documents and papers;
- <u>c</u>. Send the inventory and documents and papers to the court in which proceedings are to be held, with a written statement -- (1) Showing that the documents and papers are all the papers found, or explaining why any are missing, and (2) Showing that the documents and papers are in the same condition as found, or explaining why any are in different condition;
- d. Send as witnesses to the prize court the master, one or more of the other officers; the supercargo, purser, or agent of the prize; and any other person on board who is interested in or knows the title, national character, or destination of the prize; or if any of the usual witnesses cannot be sent, send the reasons therefore to the court; and
- <u>e</u>. Place a competent prize master and a prize crew on board the prize and send the prize, the witnesses, and all documents and papers, under charge of the prize master, into port for adjudication.
- 2. In the absence of instructions from higher authority as to which port to deliver the prize for adjudication, the Commanding Officer of the capturing vessel shall select the port most convenient in view of the interests of possible claimants.
- $\underline{3}$. If the captured vessel or any part of the captured property is not in condition to be sent in for adjudication, the Commanding Officer of the capturing vessel

shall have a survey and an appraisal made by competent and impartial persons. The reports of the survey and the appraisal shall be sent to the court in which proceedings are to be held. Property so surveyed and appraised, unless appropriated for the use of the United States, shall be sold under authority of the commanding officer present. Proceeds of the sale shall be deposited with the Treasurer of the United States or in the public depository most accessible to the court in which proceedings are to be held and subject to its order in the cause.

(b) Prize Master

- 1. Section 7658 of Title 10, United States Code, specifies that the prize master shall take the captured vessel to the selected port. On arrival he/she shall:
- <u>a</u>. Immediately deliver to a prize commissioner the documents and papers and the inventory thereof;
- <u>b</u>. Make affidavit that the documents and papers and the inventory and the prize property are the same and are in the same condition as when received, or explain any loss or change in this condition;
- <u>c</u>. Report all information regarding the prize and her capture to the United States attorney;
- \underline{d} . Deliver witnesses to the custody of the United States marshal; and
- <u>e</u>. Retain custody of the prize until it is taken therefrom by process from the prize court.
- (7) PRIZE CREW AND THEIR DUTIES. The prize crew is organized and trained to navigate, operate, and administer a seized, captured, or abandoned ship with or without the cooperation of the crew; to bring it safely into port; and to deliver it to the appropriate authorities for examination or adjudication.
- (a) The Prize Master shall, when ordered by the Commanding Officer, command the prize or abandoned ship and prize crew in all operations, subject to the orders of the Commanding Officer of this ship or other higher authority. He/she shall discharge the responsibilities prescribed in U.S. Navy Regulations for a commanding officer.
- (b) The Prize Crew Executive Officer shall organize and train prize crew personnel. He/she shall act as Prize Crew Master when the prize crew is mustered or drilled. When on board

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a prize or abandoned ship, he/she shall discharge the responsibilities prescribed for an executive officer.

- (c) The Prize Crew First Lieutenant shall organize, train, and command the deck force, Marine detachment, and supply personnel of the prize crew during drills on board a prize or abandoned ship. He/she shall have the responsibilities and authority prescribed for a head of detachment.
- (d) The Prize Crew Operations Officer shall organize, train, and command the communications and navigation personnel of the prize crew during drills on board a prize or abandoned ship. He/she shall have the responsibilities and authority prescribed for the Operations Officer and Navigator.
- (e) The Prize Crew Engineer Officer shall organize, train, and command the engineering and damage control personnel of the prize crew during drills on board a prize or abandoned ship. He/she shall have the responsibilities and authority prescribed for the Engineer Officer.
- (f) The Prize Crew Medical Officer shall organize, train, and command the medical personnel of the prize crew during drills on board a prize or abandoned ship. He/she shall have responsibilities and authority prescribed for the Medical Officer. In the event that a hospital corpsman must be assigned to direct the medical personnel of the prize crew, the ship's Medical Officer shall be responsible for functions of organization and training, and the assigned hospital corpsman shall be responsible, under the Prize Crew Executive Officer, for providing medical treatment for personnel of the seized ship and the prize crew.

g. SUPPORT FOR LAW ENFORCEMENT

(1) GENERAL. The USCG is the primary U.S. maritime agency charged with the enforcement of all federal laws on the high seas and in waters subject to the jurisdiction of the United States. When USCG LEDETs are embarked on U.S. Navy platforms, the U.S. Navy supports the USCG in its law enforcement responsibilities (primarily drug interdiction) on a not-to-interfere basis with fleet operations and readiness. Similar support is also provided to other U.S. law enforcement agencies when authorized by DOD. When operating from U.S. Navy ships, the OIC of the LEDET is responsible for directing and executing searches, arrests, or seizures of suspect vessels. Such actions are based on USCG directives and policy. The Commanding Officer, however, remains responsible for his/her ship and retains the authority to allow, disallow, suspend, or terminate any law

enforcement activity involving his command when circumstances require.

- (2) BOARDING SUSPECT VESSELS. Consistent with applicable USCG directives, LEDETs may board vessels of United States registry when directed by the senior embarked USCG Boarding Officer. LEDETs may board foreign flag vessels in international waters only after appropriate interagency coordination required by Presidential Directive (PD)/NSC-27, Procedures for Dealing with Non-Military Incidents (NOTAL). Transport to vessels being boarded is provided by U.S. Navy small boats operated by Navy personnel. The U.S. naval unit also provides backup support to the LEDET, including the use of deadly force, if necessary for self-defense or the protection of the boarding party. U.S. naval personnel may board seized and detained vessels for non-law enforcement purposes (such as damage control, rigging of the tow, etc.) when directed by their Commanding Officer.
- (3) TACTICAL CONTROL OF U.S. NAVAL UNITS IN SUPPORT OF LAW ENFORCEMENT OPERATIONS. U.S. naval units must shift tactical control to the appropriate Coast Guard authority prior to USCG LEDETs boarding suspect vessels, and establish communications on the designated law enforcement command and control net. Tactical control remains with the USCG during boardings and any subsequent towing or escort operations. The U.S. naval unit will fly the USCG ensign from the yard during all such operations.
- (4) USE-OF-FORCE IN SUPPORT OF USCG LEDET OPERATIONS. USCG use-of-force policy governs boarding operations. However, this does not limit the authority or responsibility of the Commanding Officer to use such force as is necessary for the protection of his ship and personnel.
- (5) CUSTODY OF SEIZED VESSEL/PROPERTY/PRISONERS. Custody of and responsibility for seized vessels, other property, and prisoners is retained by the USCG. The Commanding Officer may provide U.S. naval personnel to augment the LEDET to guard and control prisoners if required for security of the naval unit.
- (6) REFERENCES. See the USCG's Maritime Law Enforcement Manual, Volume 1 (Boarding Guide), chapters IV, VI, and Appendices A and D (NOTAL), for detailed guidance."
- h. VISIT AND SEARCH. This section provides procedures incident to the U.S. Government's exercise of its right as a belligerent to visit and search neutral merchant vessels suspected of carrying contraband. Visit and Search shall be in strict conformity with International Law, existing treaty provisions, NWP-9 (sections 7.6 and 7.9) (NOTAL), appropriate provisions of applicable OPORDs, and Rules of Engagement.

(1) DUTIES AND PROCEDURES. Duties of the examining officer, commanding officer of capturing vessel, prize master, and prize crew for visit and search are the same as delineated in paragraph 630.23.f. Procedures for visit and search papers to be examined, reports, record of action taken, and boarding and salvage are the same as delineated in paragraph 630.23.f.